

CZECH AVIATION







For more than 100 years, the aviation industry has been a pioneer in travelling through space, and the ceaseless technological progress an example of the immense innovative spirit of manufacturers in this sector.

We are rightfully proud of the fact that the Czech Republic is one

of the few countries in the world capable of developing and building a complete aircraft: from the airframe to the engine to the electronics, as well as supply of all the related accessories and services, owing to the wide range of activity of Czech companies.

A strong engineering foundation, superb research and development capacities, qualified labour force, government support, the excellent reputation of products and their high reliability in various climatic conditions – all these factors strengthen the country's competitiveness on global markets and allow for the continued growth of our

traditionally premium-quality aviation technologies.

For this reason, the Czech Republic is an indispensable link in the global supply chains for the aviation industry, and you would be hard put to find an aircraft without Czech parts at any international airport.

This makes the aviation industry one of the key export sectors with high added value, and we hope this catalogue contributes to its dignified presentation around the world.

Ing. Radomil Doležal, MBA,
General Director
Czech Trade Promotion Agency /
CzechTrade



Advancements in aviation set off a revolution in military craft and transportation, but it also offered new alternatives for leisure, sport and recreational activities. Each aircraft is a result of the creative efforts and knowledge of its builder. It thereby follows that the standard of aviation as a whole in each country reflects its level of education and culture.

Aviation in the Czech Republic enjoys a long tradition, carried forward by a domestic industry offering transportation aircraft, light training jet aircraft, and most of all a wide variety of aircraft for sports and recreation. An important part of this segment of aviation are Ultralight and Light Sport Aircraft, naturally followed by engines, rescue systems, parachutes and paragliders, instruments, and a wide array of other components.

Czech-produced small transportation aircraft are operated in many countries around the world and are valued for their reliability and capability for operating in difficult conditions; this is thanks to their turboprop engines, also made in the Czech Republic. Czech light training jets and light piston aircraft enjoy equal success and popularity in many countries.

Judging by the number of types and the diversity of design and construction, the biggest boom in the development of aviation has come in the form of Ultralight category aircraft. This is primarily related to the foundation of a new organization in 1990 – the Light Aircraft Association of CR, soon appointed by the state to oversee pilot training, safety and airworthiness in the Ultralight category.

Thanks to the involvement of the LAA CR, a huge number of small and mid-size businesses have emerged on the market – predominantly light/ultralight aircraft manufacturing companies. A high level of cooperation exists between these businesses and the specialized laboratories of technical universities, which

has resulted not only in the rapid development of leisure and sport aviation practiced on the more than two hundred airstrips throughout the Czech Republic, but also in a huge number of Czech aircraft providing enthusiasts with the joy of flying in many other European countries and other continents.

The world of Czech aviation and industry is determined to maintain this path of the development and manufacture of transportation, training, and sport aircraft.

The LAA CR plays its own part in this plan; we are bound by the history of our aviation's success that goes back to the foundation of Czechoslovakia in 1918, and even further back to the pioneering years of aviation in the beginning of the last century. If an "old pilot is a good pilot", then we can also claim that good airplanes are made where their manufacturing tradition reaches back longer than one generation. The quality, performance, and aesthetic standard of the products presented on the pages of Czech Aviation serve as good evidence of just that.

Jan Brskovský,
President LAA ČR

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CzechTrade

YOUR BUSINESS PARTNER IN THE CZECH REPUBLIC

Czech Trade Promotion Agency is proud to present Czech aviation products, industry and services in the new sector guide.

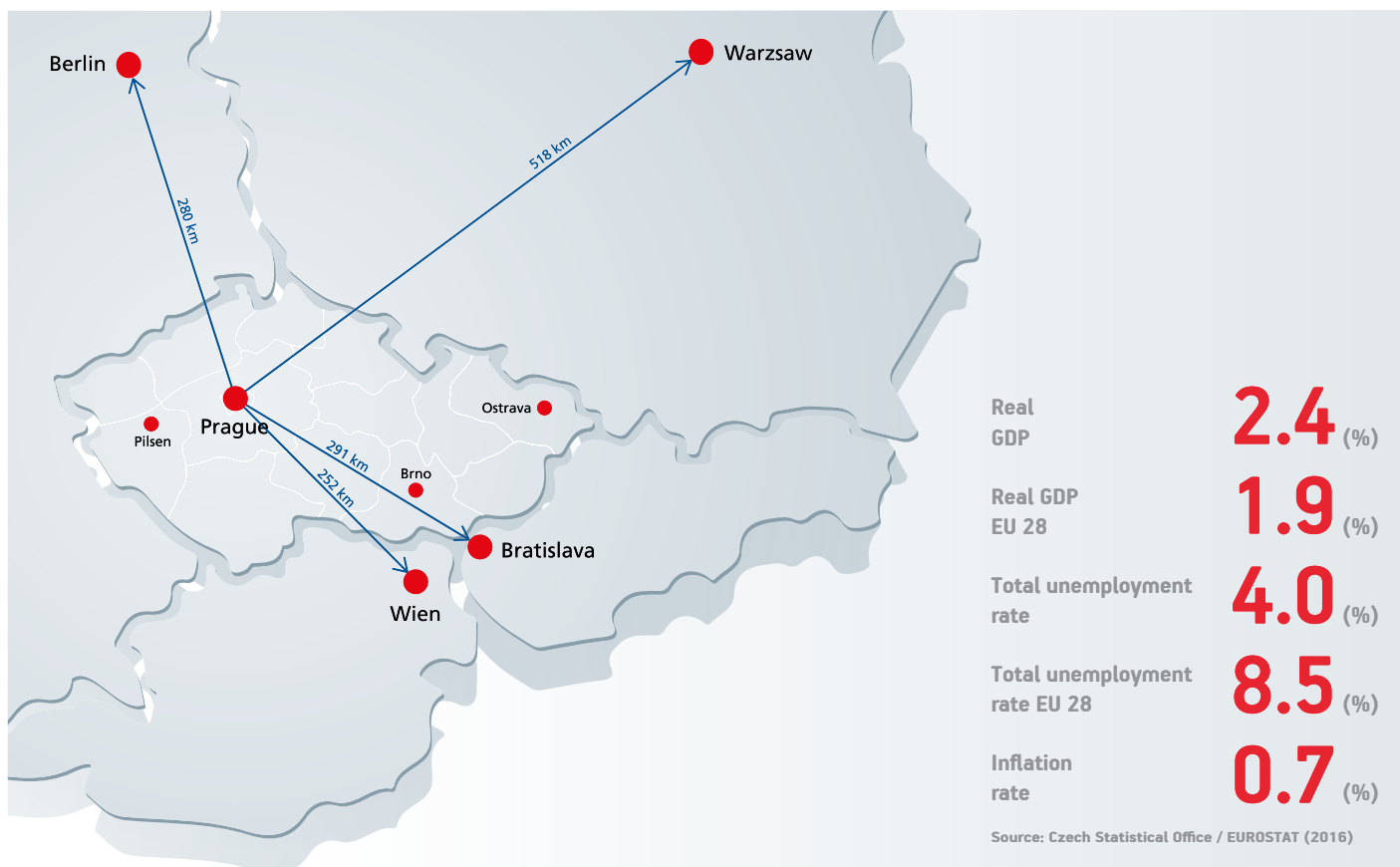
If you are looking for a supplier in the Czech Republic, Czech Trade Promotion Agency will be delighted to assist you in order to find new manufacturing / service partners, professional organisations and interest groups.



CzechTrade network contains more than 50 offices.

CzechTrade is a government trade promotion agency of the Czech Republic focusing on developing international trade and cooperation between Czech and foreign businesses. CzechTrade works with Czech companies to facilitate their success on international markets.

The goal of this brochure is to inform interested foreigners about the field of aviation in the Czech Republic. Take the companies listed in this brochure as a sample listing, which will help you to formulate a better picture of the specific field. If you are interested in more information on Czech companies, please contact: **suplier@czechtrade.cz**



Foreign companies contact CzechTrade when looking for new reliable partners in the Czech Republic. CzechTrade foreign office network together with its sourcing team will identify potential suppliers based on your requirements:

- ⊙ initial consultation by phone/email/in person
- ⊙ provision of a basic overview of a special sector
- ⊙ enquiry access to an entire supplier database through the National Business Opportunities website and a parallel dedicated supplier search
- ⊙ compilation of a contact list of companies interested in cooperation
- ⊙ eventual facilitation of meetings with Czech companies

Other services:

- ⊙ doing business in the Czech Republic guide
- ⊙ access to verified Czech suppliers
- ⊙ assistance with language support
- ⊙ presentation of Czech companies at foreign trade shows
- ⊙ preparation of business missions to the Czech Republic



**Information and contacts
for individual foreign offices
can be found at**
www.czechtradeoffices.com

Head Office:

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Dittrichova 21
128 01 Prague 2
Czech Republic
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E-mail: Info@czechtrade.cz

DID YOU KNOW?

CzechTrade has an extensive network of more than 50 foreign offices on five continents. With their scope of activities, the foreign network offices cover Europe from Scandinavia to the Balkans, Eastern Europe and the CIS, Africa from Sub-Saharan Africa to South Africa, major Asian regions, the American continents from Canada to Latin America, and Australia.

Light Aircraft Association of ČR

FOR SAFE LEISURE FLYING

The LAA ČR associates more than 7000 regular members and registers more than 13 000 active pilots with qualifications ranging from paragliding, powered paragliding (PPG), hang-gliding (HG), microlight gyroplanes and helicopters to weight-shift and aerodynamically controlled Microlights (ULM) and Ultralight Gliders.

By appointment of the Czech Government, the LAA ČR administrates the operation of Ultralight Aircraft, conducts type certification, issues and registers Pilot Licenses and Type Certificates, and trains and appoints Operations and Technical Inspectors, issues manufacturing licenses.

As of 2011 the LAA ČR's appointment was extended to include the new ELSA category with MTOW of up to 600 kg and Ultralight Gliders.

To date, the LAA registers more than 5800 SFEs of all categories (the term „Sport Flying Equipment“ includes everything from a Paraglider to a Microlight Aircraft and a 600 kg home-built ELSA).

INSURANCE

The LAA ČR arranges for bulk insurance rates for its members' third party liability, accident, personal and travel insurance policies.

INFORMATION AND EDUCATION

Together with other General Aviation organizations, the LAA ČR works to improve the safety record of sport and recreational flying through the publication of informative and educational materials for the sport and leisure pilot.

It publishes technical articles and papers aimed to educate pilots and produces instructional and methodical videos for respective segments of leisure aviation available on: www.skolenipilotu.cz.

SPORTS PROMOTION AND SUPPORT

The LAA ČR has extensive experience organizing aviation sports events and fly-ins, as well as international championships. It continuously supports local flying competitions as well as the efforts of the Czech national microlight, hang-gliding and paragliding teams. It also represents the interests of recreational aviation in the country.

LAA ČR WEBSITE

The website www.laacr.cz serves as a source of the latest news and useful information, including an events calendar and LAA's announcements, forms, aviation regulations, LAA ČR magazine's advertising pricelists and more.

NAVIGATION CHARTS

The LAA ČR designs and distributes 1:500 000 navigation charts to its members. In addition the Microlight Chapter members receive a set of 1:200 000 charts at no extra charge on top of Membership fees.

PILOT LAA ČR MAGAZINE

The magazine's aim is to inform, educate and inspire both pilots and enthusiasts. It runs technical, reportage and other articles related to Microlight flying. Pilot Magazine is a monthly periodical printed in Czech on 40 to 48 glossy color pages, and contains the LAA ČR Bulletin and various supplements. Subscription for LAA ČR members is free.

CZECH AVIATION CATALOGUE

LAA ČR publish Czech Aviation catalogue from 2007 to support and promote Czech aviation products and industry. Catalogue was published in English, Chinese and Russian language. The other issues you can find on the website www.czechaviation.info, where you can find also the other information about Czech aviation.

Established in 1990, the Light Aircraft Association of the Czech Republic (LAA ČR) is an association of pilots, builders, designers, manufacturers and operators of aircraft with MTOW up to 450 kg, including ELSA aircraft with MTOW up to 600 kg. The LAA's mission is to create and maintain good conditions for the operation of Microlight Aircraft for sports and recreation.



THE LAA ČR MICROLIGHT CERTIFICATION PROCESS

The LAA ČR system of proving the airworthiness is based on technical inspectors. For the three-axis control UL category there are 24 appointed inspectors. The technical inspectors are appointed and managed by the Chief Technical Inspector, who is an employee of the LAA ČR.

The inspectors are not employees of the LAA ČR and their duty is carried out on the voluntary (activist) basis.

The inspectors are spread regionally across the Czech Republic.

The inspectors file their registers of aircraft and have allotted their identification letters in the registration mark.

LAA ČR CONCEPT OF CERTIFICATION STRESS/STRENGTH TESTS

- Serve to prove the basic structural strength of all primary structure parts of the aircraft, such as wing, fuselage, empennage, etc.
- Each structure has to pass a system of strength tests covering the requirements of the regulations to at least the calculated limit loads.
- The tests are carried out by the manufacturer under the supervision from the LAA ČR.
- Simple loading methods are used.
- The tests are carried out until the calculated limit stress/load is achieved.
- The visual checks and measurements of the deformation are carried out too.
- Wings ultimate strength (loading to destruction) tests are preferred to ascertain the actual strength reserves of the airframe – for „P” Technical Certificate.
- The failed critical points of structures are often appropriately strengthened and the tests are repeated to find eventual other critical points.
- The test results are in case of failures compared to the design calculations and thus they serve to precise design calculation methods.

LAA ČR RECOGNISES 3 TYPES OF TECHNICAL CERTIFICATES:

„Z” a technical certificate (TC) of airworthiness of a prototype of an aeroplane, built by an individual builder. The documentation of the basic calculation is required; a building process supervision by the technical inspector and at least strength test of the wing is mandatory.

Validity of the TC = 1 year

„P” a technical certificate of airworthiness of an aeroplane that was granted a LAA ČR type certificate. A comprehensive range of stress (load) tests is carried out and the aircraft is tested up to ultimate (maximum calculated) loads. The approval procedure is carried out as an opponency. The final decision lies with the Technical commission of the LAA, where 10 top class specialists convene and decide. The technical commission is managed by the Chief Technical Inspector. The complete documentation is filed in the LAA ČR archive. The result of the process is the Type certificate.

Validity of the TC = 2 years

„A” a technical certificate of airworthiness of an aeroplane, amateur/home-built according to a documentation of aeroplane that was granted a Type certificate. The documentation has to be purchased officially from the Type certificate holder. The technical inspector carries out the supervision during the building process; a wing stress test to the maximum operational (limit) load is always required.

Validity of the TC = 2 years.

1 A SMALL COUNTRY WITH GREAT AVIATION

The development of the Czech aviation industry is directly linked to the industry of the newly founded independent Czechoslovak state following World War I. The first Czechoslovak-made airplane, the Smolik SM-1 built by the Prague-based manufacturer Letov, took off as early as 1920. Soon afterwards, Letov was followed by other emerging manufacturers with new aircraft – Aero and Avia and by others, mainly engine manufacturers in the 1930s such as Walter and Praga. These manufacturers supplied aircraft and related products to

the country's air force as well as to aviation transport companies, for example Cs. aerolinie (Czechoslovak Airlines), established in 1923. A great part of the fleet of aircraft produced at the time were sport and trainer aircraft for both private users and (mainly) aviation clubs formed under the country's national Aeroklub CSR. By the end of 1930s, Czechoslovak aviation was one of the most advanced in Europe and took part in the creation of aviation history when the names of Czechoslovak pilots were appearing on world aviation record charts and winning international

competitions, such as aerobatics, while flying the Avia B-122. During the Second World War, the Czechoslovak airmen put their sport aviation experience to good use in battle against the Nazis on both fronts, West and East, where their combat successes were largely credited to their good sport training on domestic aircraft during the times before the war. Immediately after the war, the local aircraft manufacturers, with their skillful workforce and led by top notch aviation designers, set out to develop and produce new aircraft, thus taking up the pre-war tradition.



In the years to follow the Czech aviation industry's production became focused primarily on light aircraft for flight training, air sport and tourism, and on small transportation aircraft and training jets. The Aero 45 and L-200 Morava twin-engine planes were successful world-wide, as was the all-metal training glider L-13 Blanik (more than 2700 of which are still flying on all continents today!). The production of the small transportation/cargo twin turbo-prop L-410 exceeded 1000 and continues up to the present; similarly, several thousand light training jet-planes L-29 Delfin and L-39 Albatros are still flown throughout the world. The wide range of the Czech aviation industry's production grew even more diverse with the introduction of the "ultralight" category aircraft, whose design, development, and production provides work to a number of smaller companies, thus

making for a convenient diversity of the Czech aviation industry. Such diversity of the Czech aviation industry is a result of a boom in leisure (sport and recreational) flying in recent years, which is organized by the Light Aircraft Association of Czech Republic (LAA ČR), Czech Ballooning Union (Český balónový svaz) and the Czech Aeroclub (AeCR). These three organizations associate some 20 000 members – sport pilots. Czech aircraft manufacturers, who often rely on the support of aviation experts associated in these organizations, offer a wide range of successful sport aircraft, predominantly in the Ultra Light (UL) and Light Sport Aircraft (LSA) categories, but also small transportation aircraft or components for renowned products of the European aviation industry. Besides this, the Czech Republic is a major exporter of paragliders

DID YOU KNOW?

The Czech Republic has a 100 years long tradition in aviation industry.

and parachutes, hot air balloons, and many other products including aircraft engines and ballistic parachute recovery systems. All this makes the Czech Republic a country with advanced aviation and with a long tradition of aircraft manufacturing, but most importantly it makes the Czech aviation sector an attractive partner for aviation companies worldwide.



2 AVIATION INDUSTRY IN THE CZECH REPUBLIC

The Czech Republic builds on almost one hundred years of tradition in aircraft production. It is among the industry leaders in terms of production and development in this cutting-edge and competitive field. In fact, the Czech Republic is one of the few nations in the world that has preserved the capacity to develop and produce an entire portfolio of basic aviation products – airframe, engines and propellers and related accessories.

The main field of expertise includes sport aircraft, regional airliners for up to 19 passengers, military training jet aircraft and small UAVs as well as participation in supply chains of major global producers such as Airbus, Boeing, Bombardier, Embraer and Sikorsky.

The Czech aviation industry is not only about assembly. It is also significant in terms of R&D. It takes advantage of local companies' development departments, and it cooperates closely with national research departments

(e.g. with the Czech Aerospace Research Centre in Prague) or specialised institutes from the Czech Technical University in Prague and the Brno University of Technology. Thanks to this, Czech products in the field of the aviation industry stand out in comparison with the global competition through a unique combination of creative solutions using innovative materials. Thanks to this, the Czech Republic is in the sights of significant investors. Among the largest investment deals confirming the quality of local production was GE Aviation's decision to invest 10 billion CZK into an aviation engine development and production plant in the Czech Republic. These trends signal a new modern era for the Czech aviation industry coming. The industry has grown for the fifth year in a row, owing mainly to its success on global markets and growing exports.

HIGH-TECH INVESTMENT

The appeal of the Czech aviation industry is confirmed by

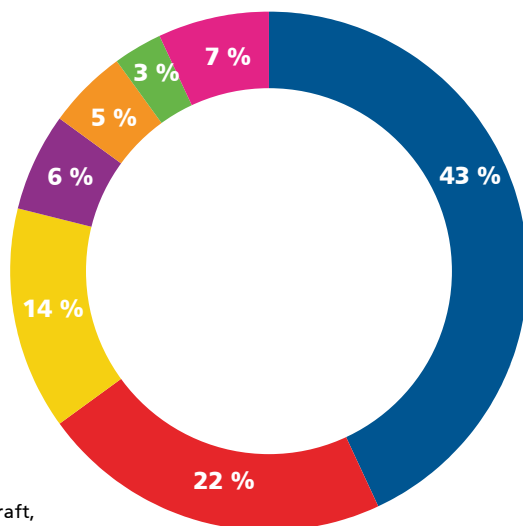
the investment agreement to build a new turboprop engine centre in the Czech Republic with operation scheduled to start in 2022. The Czech Republic has a long history of engine development and production. For decades it has been one of a few countries in the world capable of developing, manufacturing and exporting aviation engines. GE Aviation has been active in the Czech Republic since 2007 and continues this exceptional tradition of high quality engines. It completely modernised the production of the company Motorlet (formerly Walter) and developed the new H product line of engines. The Czech Republic is the cornerstone of Honeywell's global engineering strategy in Europe. The Prague Laboratory opened in 1993 and the Brno Design Centre followed ten years later. In 2006, the Brno Design Centre was integrated into Honeywell Technology Solutions' international network of research, development and engineering centres. Honeywell



Foreign Investors and Key Players in Aerospace

Source: CzechInvest

EXPORT OF AIRCRAFT AND COMPONENTS BY PRODUCTS IN 2017



Source: Czech Statistical Office, HS 6 codes of the group HS2:88 - Aircraft, spacecraft, and parts thereof

- Parts of aeroplanes or helicopters, n.e.s. (excl. those for gliders)
- Aeroplanes and other powered aircraft of an empty weight > 15,000 kg
- Aeroplanes and other powered aircraft of an empty weight > 2,000 kg
- Helicopters of an empty weight <= 2,000 kg
- Aeroplanes and other powered aircraft of an empty weight <= 2,000 kg
- Under-carriages and parts thereof, for aircraft, n.e.s.
- Others

Total exported amount: 533,213 ths. EURO (to March 2018)

also has two manufacturing sites in the Czech Republic: Aerospace in Olomouc and Environmental and Combustion Controls in Brno. More than 4,000 professionals work for Honeywell in the Czech Republic. Bell Helicopter's customisation and delivery centre in Prague offers modifications, upgrades, avionics, and special mission packages for all current Bell Helicopter models. The facility offers customisation, delivery and maintenance of Bell Helicopter aircraft and offers a wide range of aftermarket Citation Jet service offerings for Cessna. The facility in Prague serves as an anchor for Bell Helicopter in the region and is a key part of our

strategy to provide regional sales, customisation, delivery, training and aftermarket support to our European customers.

ULTRALIGHT AIRCRAFT CERTIFICATION

Certification, issuing pilot's licences and operation of ultralight aircraft in the Czech Republic is administered by the Light Aircraft Association of the Czech Republic (LAA ČR). Ultralight aircraft include paragliding, motorised paragliding, autogyro, helicopters, ultralight trikes, fixed wing ultralights, homebuilt aircraft with a take-off weight up to 600 kg (ELSA) and ultralight gliders.

THE AVIATION INDUSTRY IN NUMBERS

- The aviation industry and transport sector provides as many as 35,000 jobs, which represents just under 1% of GDP and equals 29 billion CZK.
- The average work productivity in this sector is 1.3 times higher than the average productivity in the Czech Republic.
- Approximately 90 companies employing around 9,000 people are involved in production.
- The Czech aviation industry earns around 25 billion CZK every year.
- Every fourth ultralight aircraft in the world is manufactured in the Czech Republic.
- The Czech Republic is the second largest European producer and exporter in the field of small sports aircraft.

Source: Panorama of the Manufacturing Industry 2016, Ministry of Industry and Trade, IATA

OTHER CERTIFICATION

Certification, maintenance and airworthiness of aircraft covered by the issuing of the Commission Directive (ES) no. 1702/2003 from 24th September 2003 and the maintenance of airworthiness of aircraft and aviation products, aeroplane parts and equipment and approvals by organisations and staff involved in these tasks covered by the issuing of the Commission Directive (ES) no. 2042/2003 from 20th November 2003 is within the scope of activities of the European Aviation Safety Agency (EASA). Certification includes: gliders and motor gliders; aeroplanes in the categories normal, training, aerobatic and for passenger travel; large aeroplanes; small rotary-wing aircraft, large rotary-wing aircraft; free gas balloons; hot-air balloons; tethered gas balloons.

DID YOU KNOW?

The Czech Republic is among five countries in the world which is capable of developing, manufacturing and exporting aircraft engines.

3 AUTHORITIES, ASSOCIATIONS



ORGANISATION OF CIVIL AVIATION IN THE CZECH REPUBLIC

Ministry of Transport - Civil Aviation Department

www.mdcr.cz

LAA ČR
Light Aircraft Association
of the Czech Republic
www.laacr.cz

CAA CZ
Civil Aviation Authority
of the Czech Republic
www.caa.cz

AAII
Air Accidents
Investigation
Institute

450/472,5 kg Ultralights (ULM)
& 600 kg ELSA
& 560 Gyroplanes

CAA CZ responsibility
All remaining aircraft
& parachutes

MTOW < 450 kg

Aircraft Maximum Take-Off Weight
MTOW > 450 kg

MINISTRY OF TRANSPORT

www.mdcr.cz

nábřeží Ludvíka Svobody 1222/12
110 15 Praha 1
Operator: 225 131 111
Mail room fax: 225 131 184
Data Box ID: n75aau3

MINISTRY OF INDUSTRY AND TRADE

www.mpo.cz

Na Františku 32
110 15 Praha 1
Tel.: 224 851 111
Fax: 224 811 089
E-mail: posta@mpo.cz
Data Box ID: bxtaaw4

CIVIL AVIATION AUTHORITY OF THE CZECH REPUBLIC

www.caa.cz

The Civil Aviation Authority is established by the Act No 49/1997 Coll. on civil aviation to carry out the state administration of all matters to do with civil aviation. State supervision in civil aviation is carried out by state employees of the Civil Aviation Authority within the scope of their powers specified by the Act on Civil Aviation, implementing rules and relevant regulations and directives and other documents specified by the European Communities and European Aviation Safety Agency (EASA). The Civil Aviation Authority works together with EASA and is presented as a fully standardized and respected National Aviation Authority.

Úřad pro civilní letectví
K letišti 1149/23
160 08 Praha 6
Switchboard: 225 421 111
Executive Office: 225 422 080
General Fax: 220 561 823

LIGHT AIRCRAFT ASSOCIATION OF THE CZECH REPUBLIC

www.laacr.cz

Light Aircraft Association of the Czech Republic is the designated authority for certification, licensing and operation of microlights in the Czech Republic. This covers paragliding, powered paragliding, hang gliding, gyroplanes, helicopters, weight shift and aerodynamically controlled microlights.

Ke Kablu 289
102 00 Praha 10
Tel.: 242 403 270
General fax: 242 403 596

AIR NAVIGATION SERVICES OF THE CZECH REPUBLIC

www.rlp.cz

The mission of ANS CR is to take part in the provision of cost effective, long-term sustainable aviation navigation services in an environment of evolving functional airspace blocks. In the dynamically evolving air transportation environment, its services are designed to meet the expectations of all users with regard to current and future demand at both the national level and that of the European ATM development context.

ANS CR is a reliable, predictable part of civil aviation in the Czech Republic, whose further dynamic development it actively supports. At the same time, however, it is a confident component of the European integration and liberalization processes in the ATM environment, as part of which its total value and competitiveness will continue to rise.

The basic purpose of providing ATM services is to ensure safety. For this reason ANS CR aims to maintain

or improve the safety level of provided services regardless of the air traffic volume.

Safety is a priority for the company, which takes precedence over commercial, operational and other goals. As the principal means of achieving safety ANS CR has established a safety management system and is actively improving the system.

ANS CR provides the following types of services:

- Air Traffic Control service (ATC), includes:
 - Area Control Service,
 - Approach Control Service,
 - Aerodrome Control Service / Surface Movement Control Service;
- Flight Information Service;
- Alerting Service (ALRS);
- Air Traffic Services Reporting Office.

ASSOCIATION OF THE CZECH AEROSPACE INDUSTRY

www.alv-cr.cz

The Association of the Czech AeroSpace Industry [ALV] currently has 38 members, from major prime contractors and systems suppliers, through manufacturers of aircraft aggregates and components to small specialised companies. They cover the whole spectrum of skills from design, development and production of the aerospace systems to maintenance and operation including marketing and sales.

Activities range from military and civil aircraft, aircraft engines and weapon systems, to the space research, production of aircraft systems components and aggregates, including relevant software, as well as satellite on-board equipment.

A key mission of ALV is to analyse and protect interests of aircraft industry. ALV critically examines any economic, social, financial, environmental and technical regulation likely to affect general interests of its members, whether proposed at Czech, European or international levels.

The ALV's main roles and objectives are:

- To represent and coordinate activities of members;
- To analyse and protect interests of member companies;
- To promote the Czech aerospace industry;
- To contribute to the training programmes of the Czech institutions.

To fulfil these objectives ALV stimulated establishment of the Czech Technological Platform for Aviation and Space (see below).

ALV is a member of ASD and Confederation of Industry of the Czech Republic.

CZECH TECHNOLOGICAL PLATFORM FOR AVIATION AND SPACE

www.ctpl.cz

In response to European committee initiative to create technological platforms and on basis of the ACARE challenge to develop national programmes of strategic development within aerospace industries several subjects active in aerospace sector, mainly members of the ALV, have decided to establish the Czech Technological Platform for Aviation and Space (CTPL) to support innovations, develop competitiveness and support further economic growth of the Czech aerospace industry.

The main goal of CTPL is to create business friendly environment, improve conditions for entrepreneurship and develop competitive advantages as a result of improving links between research, universities and business sphere.

To achieve this goal the CTPL supports the following activities:

- Involvement in major activities of the European aerospace technology platforms (ACARE, ASD, EREA, ING-4).
- Cooperation between R&D institutes and aerospace industry to ease commercial utilization of scientific results.
- Cooperation on policy and legislation related to education in the aerospace industry, promotion and support of all educational levels within this area (especially with the Ministry of Education and other bodies).
- Cooperation on policy and legislation related to research and development in aerospace, promotion and support of all levels of R & D in this sphere.
- Promotion of innovative activities and scientific and technical development within the Czech aerospace industry.

CONFEDERATION OF THE CZECH AVIATION INDUSTRY

www.sclp.cz

Confederation of the Czech Aviation Industry, z.s. (CCAI) is a network of aviation manufacturers, universities and other institutions. The main activities of CCAI members include production and integration of aircraft components, development and production of propulsion units for civil aircrafts, development, production and repairs of aircraft technology, onboard devices and aircraft systems, manufacturing of onboard kitchens and interiors of aircraft and production of composite and machined parts including surface treatment.

This time CCAI has 31 members – 22 aviation manufacturers, 7 universities and 2 institutions supporting aviation training, education and R&D for all members.

List of members:

- AERO Vodochody AEROSPACE a.s.
- ATG s.r.o.
- BEKO Engineering s.r.o.
- Bell Helicopter Prague, a.s.
- Czech Technical University, CTU
- Česká zbrojovka a.s.
- Engineering Academy
- EXOVA Metech s.r.o.
- Flying Academy s.r.o.
- GE Aviation Czech s.r.o.
- CHARVÁT AXL, a.s.
- Institute of Aerospace Engineering, VUT
- Jihlavan a.s.
- Jihlavan Airplanes s.r.o.
- LA Composite, s.r.o.
- LOM PRAHA s.p.
- LOM PRAHA TRADE a.s.
- LRQA Czech Republic
- maxmechanik s.r.o.
- QUITTNER & SCHIMEK s.r.o.
- Ray Service a.s.
- Řízení letového provozu s.p.
- SPEEL PRAHA s.r.o.
- STARTECH spol. s r.o.
- University College of Business, VSO
- University of Defence
- University of Pardubice
- University of West Bohemia in Pilsen
- ZNOJEMSKÉ STROJÍRNY, s.r.o.
- ZODIAC Galleys Europe s.r.o.

MORAVIAN AEROSPACE CLUSTER

www.aero-cluster.cz

Moravian Aerospace Cluster, o.s. represents regional concentration of the interrelated sectors of aviation industry, specialized suppliers, service providers, companies operating in related fields, educational and non-profit organizations, and individuals. MLK is an independent association which brings together its members on the basis of common interest in the field of research and development activities as well as production capabilities (airframe design, avionics, composite materials) in the region Moravia.

Moravian Aerospace Cluster main objectives are:

- to create conditions for maximum use of synergies between production and development potential in the aerospace industry and in related disciplines;
- to support the development of innovations and to enhance the competitiveness of members of the association in the field of aerospace and related fields;

- to promote communication and cooperation among business, public and educational institutions that have related interest;
- to prepare scientific and research projects in the field of aerospace industry and to make an effort to obtain subsidies from the public institutions and the EU's structural funds;
- to cooperate in the field of coordination activities, educational events focusing on aerospace industry and the development of human resources.

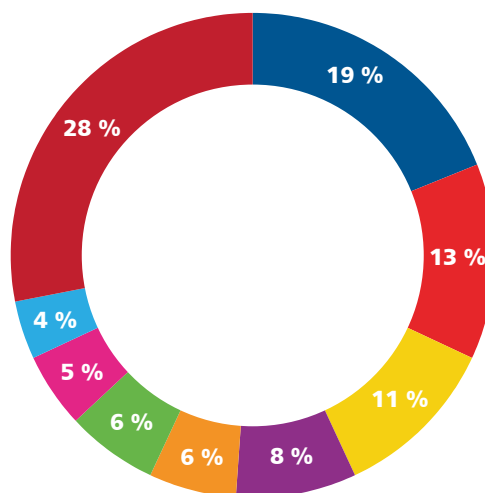
4 AIRCRAFT PRODUCED IN THE CZECH REPUBLIC

The largest concentration of aircraft manufacturers in the world is in the Czech Republic. The main field of expertise of Czech production includes sport aircraft, regional airliners for up to 19 passengers, military training jet aircraft and small UAVs.

UL-LSA AIRCRAFT

In the under 600 kg take-off weight category, the Czech Republic is along with Germany, Italy and France a world leader. Dozens of firms in the Czech Republic manufacture ultralights – some of them produces specific parts, others, for example, one or two aircraft a year through to those which manufacture six aircraft per month. In the field of small sports aircraft, the Czech Republic is the second largest European producer and exporter, whilst in the production of ultralights, Czechia accounts for more than a quarter of the world market. The majority of Czech companies manufacturing ultralights have their own development centres available and place an emphasis on design. Czech firms are also holders of the full range of certificates allowing the operation of ultralights throughout the world.

EXPORT OF AEROPLANES AND OTHER POWERED AIRCRAFT OF AN EMPTY WEIGHT ≤ 2.000 KG FROM THE CZECH REPUBLIC 2017



Source: Czech Statistical Office, HS6: 880220

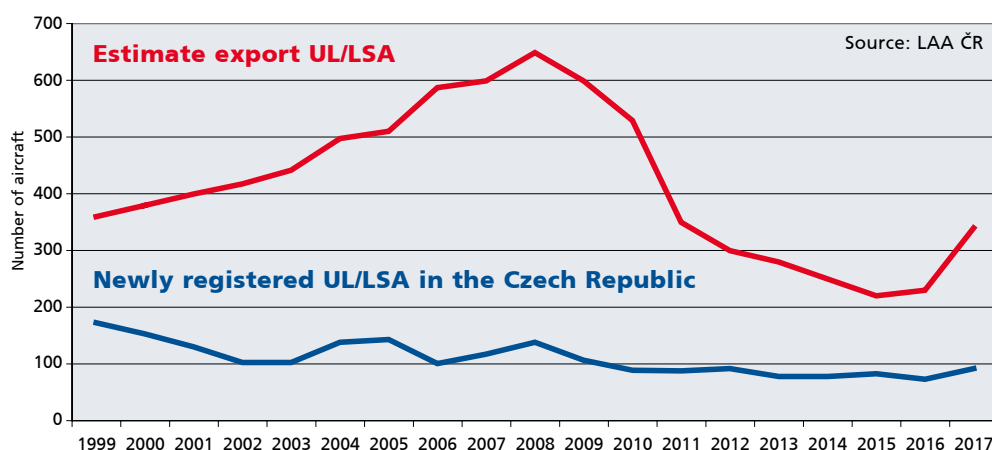
- United States
- China
- Plurinational State of Bolivia
- Belgium
- Germany
- Slovakia
- Australia
- France
- Others

Total exported amount: 26,543 ths. EURO

GLIDERS

The Czech Republic has a strong tradition as well as know-how in manufacturing gliders and high-performance gliders. The industry has been established in this country since 1920s. Czech designers were behind the legendary Blaník glider, which is once again preparing to take to the skies thanks

to the company Blanik Aircraft CZ. This glider is famous throughout the whole world because of its very good handling qualities. Pilots from the US Army as well as astronauts are trained in the all-metal Blanik glider. Just as the legendary Blanik L-13 is flown throughout the world, so too is the all-composite Shark glider from the company HPH in Kutná Hora.



DID YOU KNOW?

One in every four ultralight aircraft in the world is manufactured in the Czech Republic.



A2 CZ

ELLIPSE SPIRIT

Elliptic wing with integrated slots provides a maximum cruising speed of 275 km/h. Full carbon aramid airframe, side by side seating and sidestick controls. Designed and tested for MTOW 600 kg, warrants extraordinarily high turbulence penetration speed (V_{ra}) of 257 km/h. The Ellipse is powered by Rotax 912 UL or 912 ULS engines with fixed or variable-pitch propellers.

Span 8 m (LSA 8,6 m), length 6,55 m, wing area 9,48 m² (LSA 10,34 m²), empty weight 293 kg (incl. BRS), cruising speed 275 km/h, never exceed speed 315 km/h.

www.ellipse-spirit.com



AEROPILOT

LEGEND

Full-composite high-wing aircraft Legend is intended for sport, recreation and touristic flying. This aircraft is suitable for flight training of beginners as well. LSA (600 kg) / UL (472 kg) / ELSA (540 kg) versions are powered by Rotax 912 UL or 912 ULS engines. LSA (600 kg) version is powered by Rotax 912 IS. The propeller is two- or three-bladed, fixed or adjustable. So far 60 aircraft built.

Span 9,06 m, length 7 m, wing area 10,54 m², weight 280 – 297 kg, max. horizontal speed 225 km/h.

www.aeropilotcz.com



AEROSPOOL CZ

ULL CLASSIC

A two-seat, side-by-side high-wing braced composite monoplane for both ULL and LSA category. Powered by the Rotax 912 UL / ULS with on-ground adjustable or constant speed propeller.

Span 9,1 m, length 6,3 m, wing area 9,9 m², empty weight 285 kg, cruising speed 180 - 220 km/h.

www.aerospool.cz



AIRLONY

SKYLANE UL

A two-seat side-by-side braced high-wing ultralight monoplane of mixed, mainly composite structure. Fixed tricycle undercarriage.

The aircraft is designed for wide range of use – from trainer to long distance tourer. Main features are: roomy luggage compartment, high useful load, high cruising speed, long flying range. It is powered by Rotax 912. (So far 94 aircraft built.)

Span 8,95 m, length 6,65 m, wing area 10,57 m², empty weight 248 kg, cruising speed 135 - 210 km/h, flying range 1650 km.

www.airlony.cz



AIRLONY

HIGHLANDER

A tandem two-seat ultralight biplane of mixed, mainly composite structure. Fixed tailwheel landing gear. Highlander is designed for leisure and joyful flying with emphasis on safety. The aircraft is powered by Rotax 912 ULS and has increased G-limits up to +6/-4g.

Span 7,3 m, length 6,05 m, wing area 14,3 m², empty weight 230 kg, cruising speed 100 – 140 km/h.

www.airlony.cz



ATEC

ATEC 321 FAETA

A two-seat side-by-side low-wing ultralight airplane of mixed (composite and wood) structure. Fixed tricycle landing gear. Powered by Rotax 912 ULS or iS, with fixed or variable-pitch propellers. The aircraft is also certified for towing. The Atec 322 Faeta is the LSA version. (So far 90 machines built.)

Span 9,60 m, length 6,20 m, wing area 10,10 m², empty weight 268 kg, max. level speed V_H 250 km/h.

www.atecaircraft.eu



ATEC

ATEC 321 FAETA NG

The most advanced, all-carbon UL/LSA with tricycle landing gear is the latest modification of ATEC 321 FAETA. Designed also for 600 kg, powered by Rotax ULS/iS and fixed/variable propeller. High performance, aerodynamic purity and tapered wings with effective slotted flaps assure excellent flight characteristics and low consumption. Fast plane for multipurpose use with exceptional speed range of 54–290 km/h and flight range 2000 km. Produced since 2016.

Span 9,6 m, Length 6,2 m,
wing area 10,1 m²,
empty weight 290 kg,
cruising speed 220 - 240 km/h.

www.atecaircraft.eu



ATEC

ATEC 122 ZEPHYR

Legendary and still popular UL aircraft of composite structure with its typical T-tail, powered by Rotax UL/ULS and fixed/variable propeller. High performance and aerodynamic shape with effective tapered wings of mixed construction assure perfect flight characteristics and low-cost operation. Ideal for touring and flight schools. Produced since 1996. Its speed range is 59–289 km/h.

Span 9,4 m, length 6,2 m,
wing area 10,3 m²,
empty weight 275 kg,
cruising speed 210 - 235 km/h.

www.atecaircraft.eu



ATEC

ATEC 212 SOLO

Special single-seat UL aircraft of all-carbon composite structure with sportive look has classical landing gear. Powered by Rotax UL/ULS and fixed/variable propeller. Fast and manoeuvrable plane of sophisticated aerodynamic design with G-limits +6/-3 g and high performance is intended for experienced pilots who want to enjoy its speed about 300 km/h.

Span 7,5 m, length 5,3 m,
wing area 7,3 m²,
Empty weight 200 kg,
cruising speed 220-240 km/h.

www.atecaircraft.eu



ATEC

ATEC OMSIDER

A two-seat side-by-side high wing amphibian aircraft with T-tail. The aircraft is made of composite materials using carbon and cork processed by the highest technology of production. Electric retractable tricycle landing gear. Powered by Rotax 912ULS engine with a pusher propeller. Full operational capability on water and land. (So far 3 prototypes built.)

Span 9,3 m, length 7,5 m, wing area 11,10 m², empty weight 325 kg, cruising speed 160-180 km/h, max. level speed V_H 200 km/h.

www.atecaircraft.eu



BRM AERO

BRISTELL CLASSIC

An all-metal two-seater powered by Rotax 912 UL/ULS, 912 iS, 915 iS engines. UL Bristell is intended for training in flight schools, glider towing and recreational flying. The large cockpit and good ergonomics it's an ideal for long flights. HD version offers heavy-duty wing spars, much safer in extreme weather conditions. More than 350 Bristells have been built so far.

Span 8,13-9,13 m, length 6,45 m, wing area 10,5 m²-11,75 m², empty weight 290-330 kg, cruising speed 214/250 km/h.

www.bristell.com



BRM AERO

BRISTELL RG

An all-metal two-seater powered by Rotax 912 UL/ULS, 912 iS, 915 iS engines. The BRISTELL RG version has a retractable undercarriage – it's ideal vehicle for secondary training and economical cross-country flights. Thanks to the combined comfort of good ergonomic design in the largest cockpit in its category, this aeroplane is the ideal vehicle for long flights. RG version has heavy-duty wing spars in the standard configuration, which increases safety in extreme weather.

Span 9,13 m, length 6,45 m, wing area 11,75 m², empty weight 335 kg, cruising speed 250 km/h.

www.bristell.com



BRM AERO

BRISTELL TDO

An all-metal two-seater powered by Rotax 912 UL/ULS, 912 iS, 915iS engines. BRISTELL TDO has a two-wheel fixed gear undercarriage with tail wheel – an ideal aeroplane for enthusiasts. TDO version has heavy-duty wing spars in the standard configuration, which make cross-country flights much safer in extreme weather conditions. Its users appreciate easy operating as well as higher cruising speed against the fix gear version of Bristell.

Span 8,13 m, length 6,45 m, wing area 10,5 m², empty weight 290-310 kg, cruising speed 214-250 km/h.

www.bristell.com



CARBON DESIGN

FM250 VAMPIRE

FM250 Vampire is a modern two-seat plane. It has been well-established on the market since 2009 and it has been continuously developing and improving since then. It proved to be a perfect plane for sport or recreational flying, pilot training and an ideal towing machine approved for towing gliders up to 750 kg. Real ultralight all-composite construction, quality components and complete customer's support. The hottest model accommodates the GARMIN G3X touch system (the analogue version is still available for basic model). You can really enjoy flying.

Span 7,80m, length 6,26m, empty weight 272,5kg, cruising speed 180 – 230 km/h.

www.flyingmachines.cz



CZECH SPORT AIRCRAFT

PS-28 CRUISER

The PS-28 Cruiser is a double-seat low wing aircraft of full metal construction with cantilevered wings and conventional empennage. It is powered by Rotax 912ULS2 engine and can be equipped both with classic analogue gauges or full glass cockpit. The PS-28 Cruiser is Type Certified for VFR Day operations according to EASA CS.LSA regulation and can be fully commercially operated in all EASA countries.

Wingspan 8,6m, length 6,6m, Empty weight 381 kg, Cockpit width 1,2m, Cruise speed 93 KIAS.

www.czechsportaircraft.com


DIRECT FLY
ALTO 912TG

ALTO 912TG is a single-engine, two-seat, self-supporting monoplane. The aircraft was designed as a simple all-metal design suitable for assembly in amateur conditions, yet providing sufficient performance, low maintenance costs and easy and comfortable flight control. The aircraft is equipped with a proven ROTAX 912ULs engine, Galaxy GRS rescue system and glider tow device upon request. ALTO is also available as a kit for homebuilders in various stages of assembly.

Span 8,20 m, length 6,25 m, wing area 10,50 m², empty weight 285 kg, cruising speed 200 km/h.

www.directfly.cz


DISTAR
UFM-13 LAMBADA

A side-by-side two-seat, mid-wing UL/LSA motorglider of composite structure. Fixed tricycle or tailwheel landing gear. Powered by Rotax 912, or Jabiru 2200 engines, with fixed or variable-pitch propeller. The wings may be fitted with wingtip extensions, increasing the span to 15 m. (About 150 aircraft in the UFM-11-13 version have been produced so far).

Span 13,0/15,0 m, length 6,60 m, wing area 12,60 m², empty weight from 280 kg, cruising speed 150 km/h.

www.distar.cz


DISTAR
SAMBA XXL

A low-wing, composite side-by-side two seat ultralight monoplane. Fixed tricycle landing gear. Powered by Rotax 912UL or ULS engines, with fixed or variable-pitch propeller. Since 2010 it is manufactured with a modified cockpit, providing great comfort in the cabin. Meets requirement for towing gliders up to 600 kg. (More than 110 aircraft have been produced so far.)

Span 10,00 m, length 6,00 m, wing area 8,90 m², empty weight 290 kg, cruising speed 220 km/h.

www.distar.cz



DOVA AIRCRAFT

DV-1 SKYLARK

All-metal aircraft complying with Ultralight/AULA/LSA/ELSA regulations. The tapered low wing equipped with winglets and the T-tail present unique design in this category. It has fixed tricycle landing gear and is powered by Rotax 912UL/ULS with fixed or variable-pitch propeller. Available in certified towing version for gliders with MTOW 510 kg. So far 205 aircraft have been produced.

Span 8,13 m, length 6,62 m,
wing area 9,44 m²,
empty weight 285 kg,
cruising speed 215 km/h.

www.dovaaircraft.cz



EVEKTOR-AEROTECHNIK

EUROSTAR SL+

An all metal, two seat UL aircraft powered by Rotax 912ULS. Wing tank 120l fuel capacity. Popular for training in flight schools, glider towing and recreational flying. Together with LSA version 1400+ aircraft delivered in 50 countries worldwide.

Span 8,15 m,
length 5,98 m,
wing area 9,84 m²,
empty weight 280 kg,
cruising speed 200 – 240 km/h.

www.evektoraircraft.com



EASA CS-LSA Certified

EVEKTOR-AEROTECHNIK

SPORTSTAR RTC

Two seat EASA CS-LSA certified aircraft. Advanced design, robust metal airframe and low operating cost make the aircraft an excellent training platform for PPL/Part-FCL training in flight schools, aeroclubs and for pilot touring. Powered by Rotax 912S engine. Fixed landing gear with steerable nose gear. Analog & Glass cockpit EFIS + EMS versions.

Span 8,65 m, length 5,98 m,
wing area 10,47 m²,
empty weight 343 kg,
cruising speed 200 km/h.

www.evektoraircraft.com



EVEKTOR-AEROTECHNIK

HARMONY LSA

FAA approved Light Sport Aircraft. Advanced all metal structure. Powered by Rotax 912ULS, 914 Turbo or 912iS Sport engines. Equipped with Garmin G3X or Dynon SkyView Glass Cockpit. Popular for pilot training in flight schools in USA and Australia.

Span 9,25 m,
length 6,11 m,
empty weight 319 kg,
MTOW 600 kg,
cruising speed 200 km/h.

www.evektoraircraft.com



GRAMEX

SONG LW/ E-SONG

A single-seat, carbon-fiber composite aircraft for the 120 kg category. powered by Polini 250LC (36hp) engine. Electric version e-Song is powered by Rotax Rex300/2/3 (18 kW) engine and it is LAA CR Type Certified. Song complies with US Part 103, UK's SSDR and German 120 kg categories. 22 aircraft have been built so far.

Span 11,2 m, length 5,9 m,
wing area 10,50 m²,
empty weight 120 kg,
(e-Song 106 kg + 2 x 13 kg battery)
MTOW 235 kg,
maximum speed 140 km/h.

www.airsport.cz



IVANOV AIRCRAFT

ZJ-VIERA

The true motorbike of the sky. ZJ-Viera is an extremely lightweight single-seater, designed by Marek Ivanov. Of mainly composite structure, its wing is partly covered in Ceconite fabric. Powered by a single-cylinder Flyengine F200 two-stroke of 19 kW / 26 hp. 16 aircraft have been built so far.

Span 7,50 m, length 5,00 m,
wing area 9,00 m²,
empty weight 77 kg,
cruising speed 103 km/h.

www.ivanovaero.cz



JAROSLAV SEDLÁČEK UL-JIH COLIBRI

Easy built aircraft, with two side-by-side seats, braced wing, powered by Rotax 503 UL/DCDI in pushing configuration. Sprung landing gear with a nose wheel. Suitable for beginners and for recreational flying. Fuselage - aluminum and steel tubes. Wings - aluminum tubes, PU ribs, aluminum structure ailerons, steel support structure with thin wall steel tubes. Wing fuel tanks optional. 36 aircraft have been built so far.

Span 9,44 m, length 5,5 m, wing area 12 m², weight 195 kg, speed range 62 - 140 km/h.

www.uljih.cz



JAROSLAV SEDLÁČEK UL-JIH SUNWHEEL UL

A retro style biplane tail-dragger with dual controls, powered with Rotax 912 UL four stroke engine. The fuselage is an argon-welded steel-tube truss structure covered with canvas. The wings' spars are aluminum tubes with PU ribs covered with canvas. The ailerons are fitted on both upper and lower wings. 82 aircraft have been built so far.

Span 7 m, length 6,1 m, wing area 16 m², empty weight 251 kg, MTOW 400 kg, Stall speed 50 km/h, cruising speed 130 km/h.

www.uljih.cz



JAROSLAV SEDLÁČEK UL-JIH F100 FASCINATION

A side-by-side two-seat, cantilever low-wing monoplane of all-composite structure. Wing with slotted flaps, fixed or retractable tricycle landing gear. Powered by Rotax 912UL (ULS), with a ground-adjustable DUC, or variable-pitch Woodcomp SR 3000/2W propeller. 210 aircraft have been built so far.

Span 9,00 m, length 6,65 m, wing area 10,76 m², empty weight 294 kg, cruising speed 243 km/h.

www.uljih.cz



JAROSLAV SEDLÁČEK UL-JIH

E100 EVOLUTION

A side-by-side two-seat, cantilever high-wing monoplane of composite structure. Wing with slotted flaps, fixed or retractable tricycle landing gear. Powered by Rotax 912UL (ULS), with a ground-adjustable DUC, or variable-pitch Woodcomp SR 3000/2W propeller. 12 aircraft have been built so far.

Span 9,12 m, length 6,9 m, wing area 11 m², empty weight 294 kg, cruising speed 243 km/h.

www.uljih.cz



JMB AIRCRAFT

VL3 EVOLUTION

The VL3 Evolution is a fast, safe and economical touring UL aircraft, and with over 300 VL3's produced in recent years, it is also successful. The highly aerodynamic design of this low-wing aircraft makes it extremely forgiving on approach. You can easily land on very short runways of only 150m. It's highly stable in the air in gusty condition and at cruising speed above 300 km/h. All of this makes the VL3 Evolution unique in its category.

Span 8,44 m, length 6,24 m, wing area 9,77 m², empty weight (incl. rescue system) 290 – 340 kg, cruising speed 300 km/h, range 2400 km.

www.jmbaircraft.com



KUBÍČEK AIRCRAFT

M-2 SCOUT

A side-by-side two-seater low-wing aircraft of classic shapes and "retro" look, available in UL and LSA versions. Powered by Rotax 912 with fixed or variable-pitch propeller. Fixed tricycle landing gear, nosewheel steerable. (4 aircraft have been built so far.)

Span 9,40m, length 6,75m, wing area 12,90 m², empty weight 295 kg, cruising speed 180 – 220 km/h.

www.kubicekaircraft.cz



PHOENIX AIR

U-15 PHOENIX

A composite structure, low-wing configuration, two-seat, side-by-side, LSA/UL motorglider. Tail-dragger with fixed landing gear. Powered by Rotax 912 or Jabiru 2200 engines. Propeller is two blade feathering from Woodcomp. (42 aircraft have been built so far.)

Span 15,00m, length 6,50m,
empty weight 300 kg,
wing area 12,36 m²,
speed V_H 220 km/h,
cruising speed 180 km/h,
glide ratio 32:1+

www.phoenixair.cz



PROFE

BANJO MH

A single-seat braced high-wing ultralight of mixed wood/fiber-glass structure, powered by Hirth F33B. Retractable wooden two-blade ProFe propeller. Fixed single-wheel landing gear. (48 aircraft produced so far.)

Span 13,30m, length 6,30m,
wing area 10,50 m²,
empty weight 157 kg,
cruising speed 110 km/h,
glide ratio 28:1 at 85 km/h.

www.profe.cz



PROFE

DUO BANJO

A two-seat braced high-wing ultralight of mixed wood/fiber-glass structure, powered by Rotax 447. Retractable wooden two-blade ProFe propeller. Fixed two-wheel landing gear. (12 aircraft produced so far.)

Span 16,00m, length 7,35m,
wing area 13,86 m²,
empty weight 260 kg,
max. level speed V_H 142 km/h,
glide ratio 29:1 at 103 km/h.

www.profe.cz



ROKO AIRPLANES

NG4 VIA

The VIA - UL, ELSA, LSA is a full metal two seater low wing aircraft with tricycle landing gear. Powered by Rotax 912UL, ULS, IS and UL Power engines. The VIA is intended for all types of flying including recreational, tourism and flight training. (22 aircraft have been manufactured so far.)

Span 9,19 m, length 6,45 m,
wing area 12,29 m²,
cruising speed 220 - 240 km/h,
empty weight 330 kg.

www.rokoairplanes.com



ROKO AIRPLANES

NG6

The NG6 is a full metal two seater low wing aircraft with tricycle landing gear. The NG6 is powered by Rotax 912 UL/ULS/IS/ 914. This aeroplane is intended for all types flying including recreational, tourism and flight training.

Span 8,12 m, length 6,45 m,
height 2,28 m,
cabin width 1,3 m,
cruising speed 195 - 250 km/h,
empty weight from 272 kg.

www.rokoairplanes.com



SHARK.AERO CZ

SHARK

Carbon fiber composite high-performing low-wing tandem seater, retractable landing gears, integrated ballistic parachute. Adjustable seats and pedals, modern avionics, easy handling, low operating cost, short take-off. World speed record holder. Certified in Czech, Germany, and China.

Wingspan 7,9 m, Length 6,7 m,
Height 9,5 m²,
Empty weight 325 kg (full options),
MTOW - UL 472,5 kg,
- experimental 600 kg,
Max. cruising V_H 300 km/h,
Cruising speed 250 - 270 km/h,
Flight range (100l tanks) 1600 km.

www.shark.aero



SPACEK

SD-1 MINISPORT

A single seat cantilever low wing UL/LSA/experimental airplane of mixed wood/composite construction with fixed landing gear in taildragger or tricycle configuration. It can be powered by engines in the range of 24-50 HP. Suitable for amateur construction. (More than 170 kits and airplanes have been produced so far.)

Span 6 m, length 4,3 m,
wing area 6 m²,
empty weight 120 kg,
gross weight 240 kg,
max. level speed V_H 200 km/h.

www.sdplanes.com



SPACEK

SD-2 SPORTMASTER

A two seat side by side cantilever low wing UL/LSA/experimental airplane of mixed wood/composite construction with fixed landing gear in tricycle configuration. The slotted flap assures low stall speed at high wing loading which allows high cruise speed in rough air. Powered by Rotax R912 UL/ULS. Suitable for amateur construction. (2 prototypes have been built so far.)

Span 8,7 m, length 5,8 m,
wing area 9,1 m²,
empty weight 260-290 kg,
gross weight 600 kg,
max. level speed V_H 260 km/h.

www.sdplanes.com



TECHPRO AVIATION

MERLIN 100 UL

Single seat UL, all-metal airplane powered by Rotax 582. Merlin is easy and fun to fly. Roomy cockpit and ergonomic control stick with throttle & brake ensures maximum pilot comfort.

Span 8 m, length 5,2 m,
empty weight 180 kg,
cruising speed 150 km/h.

www.techproaviation.com

**TL-ULTRALIGHT****TL-2000 STING S4**

Aerodynamically and visually enhanced version of the successful Sting brings even better performance and appearance. The Sting S4 is a two seater low-wing aircraft made from carbon fiber. Powered by a Rotax 912UL, 912ULS or 912iS with a ground-adjustable or a new variable-pitch three-blade PowerMax propeller. (More than 550 Stings have been manufactured so far.)

Span 9,11 m, length 6,2 m,
wing area 10,52 m²,
empty weight 297 kg,
max. horizontal speed 270 km/h.

www.tl-ultralight.cz

**TL-ULTRALIGHT****TL-3000 SIRIUS**

A side-by-side two-seat light sport high-wing carbon composite aircraft with fixed tricycle landing gear. Powered by a Rotax 912UL, 912ULS or 912iS with a ground-adjustable or new variable-pitch three-blade PowerMax propeller. TL 3000 Sirius – the perfect partner for fun flying without limits. (More than 200 Siriuses have been manufactured so far.)

Span 9,40 m, length 6,75 m,
wing area 11,15 m²,
empty weight 297 kg,
max. horizontal speed 230 km/h.

www.tl-ultralight.cz

**TL-ULTRALIGHT****TL-2000 STING RG**

A side-by-side two-seat cantilever low-wing light sport aircraft of composite construction with fixed or retractable tricycle landing gear. Powered by a Rotax 912UL, 912ULS or 912iS with a ground-adjustable or a new variable pitch three-blade PowerMax propeller.

Span 8,44 m, length 6,19 m,
wing area 9,81 m²,
empty weight 297 kg,
max. horizontal speed 270 km/h.

www.tl-ultralight.cz



TL-ULTRALIGHT TL STREAM

A tandem two seat high performance low-wing carbon composite UL/LSA aircraft with retractable tricycle undercarriage. Powered by a Rotax 912 ULS with variable-pitch three blade PowerMax propeller. Stream Turbo is currently in development. Stream production is about to begin and the company accepted orders of first pieces.

Span 9,00m, length 6,88m, empty weight from 297 kg, max. cruising speed V_H 300 km/h.

www.tl-ultralight.cz

EASA CS-LSA Certified



TOMARK AERO CZ VIPER SD-4

Viper SD-4 is an aerodynamically controlled all-metal two seater UL/LSA aeroplane, ideal for sports, travelling, pilot training, glider towing, and recreational flying. Fixed tricycle landing gear with a front wheel. Powered by Rotax 912/914 ULS engine with fixed or variable pitch propeller. Kit version available. Viper SD-4 is approved by EASA RTC. 130 aircraft have been produced so far.

Span 8,4m, length 6,4m, wing area 10,8 m²
MTOW 472,5 kg / 600kg,
Cruising speed 210 km/h.

www.tomarkaero.com



TOMARK AERO CZ SKYPER GT9

Skyper GT9 is an all-metal UL/LSA high wing, side by side aircraft, ideal for travelling, pilot training, relax and adventure flying. It is used also for unique visual experiences and for making photos and videos. Powered by Rotax 912 ULS engine with fixed or variable pitch propeller. Fixed tricycle landing gear with a front wheel. 10 aircraft have been produced so far.

Span 9,1 m, length 6,3 m, wing area 9,9 m²
MTOW 472,5 kg / 600kg,
Cruising speed 210 km/h.

www.tomarkaero.com



TOMÁŠ PODEŠVA TULÁK DANDY

A two-seat side-by-side high-wing braced ultralight monoplane of classic design. All-wood flapped wing is attached to a welded steel tube truss fuselage. Fixed tailwheel landing gear. Powered by Rotax 503 or 912 and similar powerplants. (So far 75 aircraft flying.)

Span 9,80 m, length 5,60 m,
wing area 10,80 m²,
empty weight 255 kg,
cruising speed 100 – 140 km/h.

www.podesva-air.com



TOMÁŠ PODEŠVA TRENER UL

A tandem two-seat low-wing ultralight, inspired by the famous Zlin Trener line. Mixed metal/wood structure, with either wooden or metal wing and welded steel tube truss, fabric covered fuselage. Fixed or retractable tailwheel landing gear. Powered by Parma Technik (Walter) Mikron III C. (15 aircraft flying.)

Span 8,68 m, length 6,40 m,
wing area 10,80 m²,
empty weight 292 kg,
cruising speed 165 km/h.

www.podesva-air.com



WOLFSBERG AIRCRAFT SPARROW ML

A tandem, two-seat, cantilever all-composite low wing ultralight aircraft in pusher configuration and twin tail booms. Powered by Rotax 912 with a ground adjustable or variable-pitch propeller. Fixed tricycle landing gear with a steerable nose wheel. Sparrow ML has large door providing an easy entry. Pilot position in front of the wing brings excellent view.

Span 9,2 m, length 7,0 m,
Empty weight 282 kg
Cruising speed 130-208 km/h.

www.wolfsbergaircraft.com



ZLIN AVIATION

SAVAGE

The Savage is a tandem two-seat ultralight aircraft of classic braced high-wing design, inspired by the lines and flying qualities of the Piper Cub family. Rugged structure of welded steel tube fuselage and empennage, covered with Dacron, and flapped all-metal wings ensure longevity and ease of maintenance. Several versions and factory options available.

Span 9,31 m, length 6,39 m, empty weight 288 kg, cruising speed (75%) 170 km/h.

www.zlinaero.com



ZALL JIHLAVAN AIRPLANES

SKYLEADER 600

The Skylader 600 is an all-metal two-seat low-wing ELSA/LSA aircraft with a tapered wing. The aircraft has a tricycle towed landing gear with a steerable nose wheel and either retractable or fixed gear options. The aircraft are designated mainly for recreational flying, pilot training and special operations. Engine type: Rotax 912 UL, ULS, 914UL or 912iS. 65 aircraft have been built so far.

Span 9,90 m, length 7,1 m, wing area 11,85 m², empty weight 350 kg, MTOW 600 kg, cruising speed 220 km/h.

www.skyleader.aero



ZALL JIHLAVAN AIRPLANES

SKYLEADER 200/500

The Skylader 200/500 is an all-metal two-seat low-wing UL/LSA aircraft with a tapered wing. The aircraft has a tricycle towed landing gear with a steerable nose wheel and either retractable or fixed gear options. The aircraft are designated mainly for recreational flying, pilot training and special operations. Engine type: Rotax 912 UL, ULS, 914UL or 912iS. 249 aircraft have been built so far.

Span 9,90 m, length 7,2 m, wing area 11,85 m², empty weight 298 / 313 kg, MTOW 472,5 kg / 600 kg, cruising speed 216 km/h.

www.skyleader.aero


ZALL JIHLAVAN AIRPLANES
SKYLEADER 400

The Skyleader 400 is an all metal two-seat, low wing constructed aircraft with a trapezoidal wing. The aircraft has a new tricycle towed fixed landing gear with a steerable nose wheel. The aircraft are designated mainly for recreational flying, pilot training and special operations. 11 aircraft have been built so far.

Span 9,20m, length 6,4m,
wing area 11,47 m²,
empty weight 306 kg,
MTOW 472,5 / 600 kg,
cruising speed 175 km/h.

www.skyleader.aero


ZALL JIHLAVAN AIRPLANES
SKYLEADER 100

The Skyleader 100 is an all-metal one-seat low-wing ultralight aircraft with a rectangular or tapered wing. The aircraft has a conventional "taildragger" landing gear with a fixed gear option only. The aircraft is designated mainly for recreational flying. Engine type: Rotax 503UL, 582UL, HKS 700. One prototype has been built so far.

Span 6,9m, length 5,6m,
wing area 8,37 m²,
empty weight 210 kg,
cruising speed 138 km/h.

www.skyleader.aero


ZALL JIHLAVAN AIRPLANES
SKYLEADER GP ONE

The Skyleader GP ONE is carbon-composite two-seat, high-wing ultralight aircraft with a monocoque construction. The aircraft has a fixed tricycle landing gear with a steerable nose wheel. This aircraft is designated mainly for pilot training and low-cost flying. Engine type: Rotax 912 UL. 12 aeroplanes have been built so far.

Span 10,2m, length 6,25m,
wing area 11,17 m²,
empty weight 306 kg,
cruising speed 174 km/h.

www.skyleader.aero



CARBON DESIGN

FM-301 STREAM

FM-301 Stream is an all-composite two seater microlight trike of frameless loadbearing construction. The aerodynamic shape of the machine makes it quite easy and comfortable to handle both on ground and in the air. Unbeatably large baggage compartment is situated inside the trike's body. It easily accommodates bulky camping equipment and gear necessary for longer travel.

Weight ready to fly (Rotax 912, Rescue system, Wing CZ 15,4) 223 kg.

www.flyingmachines.cz



TOMI-AVIATION

TOMI-CROSS 5 SPORT

A tandem two-seat powered trike for a hang-glider wing. Independent suspension with individually sprung wheels. Rear-wheel spats with directional fins. The frame is made of steel and dural tubing. Aluminium fuel tank has a 38 litre capacity. Designed for Rotax, Hirth and other engines and Aeros wings.

Weight (without engine and instruments)

up to 60 kg,
wheel track 1620 mm,
wheel base 1750 mm.

www.rogalo.info



ULTRALIGHT DESIGN

EGO TRIKE

EGO trike is light, fully composite one seater, or from 2015 also tandem, designed for ATOS gliders. For its aerodynamic cleanliness is especially suitable for flying in thermals with very low fuel consumption. Complies with German DULV 120 kg regulation. Partially disassembled fits into a car for transportation. Petrol or electric versions available.

Wheel track 1500 mm,
wheel base 1700 mm,
transport size : 1750 x 430 x 750 mm
MTOW 213/320 kg,
cruising speed 60-90 km/h (ATOS VR),
minimum sink rate 0,8 m/s (engine off).

www.ultralightdesign.cz


BLANIK AIRCRAFT CZ
L-23 SUPER BLANÍK

The L-23 Super Blaník sailplane is a cantilever, high-wing, two-seat glider with one-part canopy made of all-metal structure designed to basic and advanced pilot training. The rudder, elevator and ailerons are fabric covered. Both cockpits are fully equipped. Tow hooks either for winch or aero-tow take-off. Semi-retractable main gear and the tail landing gear.

Span 16,2m (18,2 m),
wing area 19,15 m² (20,00 m²),
weight 310kg (315 kg),
manoeuvring speed
(max. speed aerotow) 150 km/h,
glide ratio 28:1.

www.blanik.aero


HPH
304S SHARK FAMILY

High performance FAI 18 m wing span all-composite single-seat gliders:
304MS SHARK- Self launcher with retractable Solo Engine; cruising speed 140 km/h; endurance up to 500 km.
304S JET SHARK- with retractable small JET engine as a sustainer; cruising speed 160 km/h; endurance up to 150 km.
EASA TC EASA.A030. (More than 1600 aircraft including 100 304S have been manufactured so far.)

Span 18,00 m, length 6,79 m,
empty weight from 290 kg to 430 kg
(depending on the engine system),
max take off weight 600 kg, glide ratio 50:1 at 600 kg and 125 km/h.

www.hph.cz


HPH
304C WASP

High performance FAI standard class 15 m wing span all composite single-seat glider Standard Class glider with a T-tail. Water ballast tanks for 115 litres in wing. Retractable braked single main wheel 5x5. 304C is an easy and excellent glider for a beginner.

EASA TCDS No. EASA.A.030
(77 aircraft been manufactured so far.)

Span 15 m, length 6,45 m.
wing surface 9,90 m²,
empty weight 235 kg,
glide ratio 42,5:1 at 116 km/h.

www.hph.cz



HPH

304TS TWINSHARK

High performance FAI 20 m wing span two-seater glider. Self launcher with retractable Solo Engine; cruising speed 140 km/h, typical endurance up to 500 km. EASA Type Certificate pending. In progress: testing of the first prototypes and serial production preparation.

Span 20m, length 8.95 m, wing surface 15,2 m², empty weight 485 kg, max. take-off weight 850 kg, best glide ratio 49:1 at 128 km/h.

www.hph.cz



AIRCRAFT INDUSTRIES

L 410 UVP-E20

The all-metal, high-wing turboprop commuter, L 410 UVP-E20, is powered by two GE H80-200 engines and AV-725 propellers. The aircraft, in its standard version, is intended for short-haul transport of up to 19 passengers and cargo from remote and undeveloped areas to major cities. Depending on its equipment, it is suitable for various purposes. Since 1969, more than 1 200 aircraft in the L 410 series have been produced.

Span 19,98m, length 14,42 m, MTOW 6600kg, max. cruising speed 405 km/h TAS, max. range 1500km, TBO 3600 FH.

www.let.cz



AIRCRAFT INDUSTRIES

L 410 NG

The L 410 NG is substantially upgraded all-metal, high-wing turboprop commuter powered by two GE H85 engines and AV-725 propellers. The state of the art Glass Cockpit technology with the latest avionics from Garmin G3000 provides the highest level of flight safety and comfort for the crew. The aircraft, in its standard version, is intended for short-haul transport of up to 19 passengers and cargo from remote and undeveloped areas to major cities.

Span 19,48m, length 15,07 m, MTOW 7 000kg, max. cruising speed 417 km/h TAS, max. range 2570km, TBO 3600 FH.

www.let.cz


EVEKTOR-AEROTECHNIK
**VUT100 COBRA/
SUPERCOBRA**

A four-seat cantilever low-wing touring monoplane of all-metal structure. Retractable tricycle landing gear. A glass cockpit with the PFD and MFD displays. Powered by Lycoming IO-580B-1A of 235 kW/315 hp with a three-blade constant-speed propeller. (Three prototypes are in operation.)

Span 10,50m, length 8,00m,
wing area 12,20 m²,
empty weight 880 kg,
MTOW 1450 kg,
cruising speed 310 km/h.

www.evektoraircraft.com


EVEKTOR-AEROTECHNIK
EV-55 OUTBACK

The EV-55 Outback is the new generation twin engine utility turboprop airplane for transport of 9 to 14 passengers or up to 1776 Kg of cargo. The airplane has an all metal structure and is powered by PT6A-21 engines with 4-blade constant-speed propellers. Retractable landing gear with anti-skid system

Span 16,10m,
length 14,35 m,
max. take-off weight 4600 kg,
max. cruising speed 408 km/h.

www.evektoraircraft.com


ORBIS AVIA
SM-92TE PRAGA ALFA

SM-92TE PRAGA Alfa is a single-engine high-wing multipurpose aircraft with 7 seats (10 skydivers) or cargo (PART 23, Normal Category). Powered by GE H75 (750 SHP) turboprop engine with a double acting propeller AV803. Engine with surplus performance for safety is have TBO 3600 FH / 12 000C (without HSI and calendar limit). Routine and simple maintenance.

Wing span 15 m, length 10 m,
MTOW 3000 kg, empty 1670 kg,
max. payload 900 kg,
max. operating speed 300 km/h,
stall speed KCAS MTOW 113 km/h,
endurance 5 hours, climb rate 10 m/s.

www.orbisavia.cz



ZLIN AIRCRAFT

Z 143 LSi

The ZLIN Z 143 LSi is characterized by its brilliant versatility. The multi-purpose ZLIN Z 143 LSi offers a standard four-seater or an aerobatic two-seater. It is designed for basic military training, night and IFR flights, aerial surveillance, and commercial flights. Its additional tank allows over 13 hours of flight. When equipped with a complete camera system, this aircraft can carry out survey and rescue missions.

Span 10,14 m, length 7,58 m, wing area 14,77 m², empty weight 855 kg, cruising speed 242 km/h VTAS - (altitude 610 m, flaps retracted, cruising engine power 75% MC), Cat.U.

www.zlinaircraft.eu



ZLIN AIRCRAFT

Z 242 L

The fully aerobatic ZLIN Z 242 L two-seat aircraft is designed for basic military training, night and IFR training flights, and aerobatic training. The aircraft features easy yet precise maneuverability, exceptional flight characteristics, a strong performance and a G-force range of +6/-3.5, all of which make the ZLIN Z 242 L an ideal training model.

Span 9,34 m, length 6,94 m, wing area 13,86 m², empty weight 745 kg with MTV propeller, 755 kg with Hartzell propeller, cruising speed 214 km/h VTAS (altitude 500 m, flaps retracted, cruising engine power 75% MC), category Aerobatic.

www.zlinaircraft.eu

5 ELECTRIC AIRCRAFT

Just as with other fields, the field of aviation also entails a high ecological burden. Therefore, measures to lower aircraft usage as well as thus fuel consumption or their levels of noise pollution have been adopted. Manufacturers of aviation technology that respond to these measures greatly increase their competitiveness. The fundamental technological change primarily concerns the new aircraft propulsion systems, especially those run on electricity. The main reason is the very high efficiency of electrical propulsion units, which is three times higher even than combustion engines. Moreover, electrical propulsion systems do not produce noise pollution and create very low thermal stress. The subject of development remains power sources for electric motors in aircraft. The Czech Republic as a leader not only in the manufacture of small aircraft but also their development has the ideal conditions available for the construction and operation of aircraft. These conditions allow for the development and implementation of new technology, their testing and subsequent approval for



operation. One of the projects established right here in the Czech Republic is the project ΦNIX. This project is unique in that it is not only focused on electric aircraft but also superfast recharging, aerial charging using a range extender and also through airport supercharger installation and infrastructure. The aim of the project is the production of purely electric two-seater aircraft with a battery life of four hours and a recharge time to 90% of the battery capacity in 18 minutes and communication with recharger with an ordinary connector CCS2 and CHAdeMO. This is a very interesting and innovative alternative

– more information about Project ΦNIX at www.pure-flight.eu. A crucial role in the process of developing electric aircraft has been played by LAA ČR, under whose auspices Czech companies have developed and put into operation other electric aircraft. One example is the single-seater aircraft EGO TRIKE (manufacturer Ultralight Design s.r.o.) with a battery life of up to two hours or SONG (manufacturer Ivanov Aircraft s.r.o.) with almost an hour of battery life. In the two-seater class, there is, for example, the electric aircraft Phoenix (manufacturer Phoenix Air s.r.o.), which took flight as the first two-seater in the world in 2011, or the first credible alternative, in terms of performance, to the most widely used combustion engines, which is the EPOS aircraft (producer Evekotor spol. s r.o) with 80 kW electric engine.



DID YOU KNOW?

The first electric aircraft, which flew over the English Channel, was equipped with a Czech engine and Czech electronics and controls.



EVEKTOR-AEROTECHNIK SPORTSTAR EPOS+

An all-metal side-by-side two seat LSA aircraft driven by an electric motor. Engine performance is controlled by an electronic control unit. Project was designed with financial support of TA ČR.

Span 10,5m, length 5,98m, MTOW 600 kg, electric engine REB 90 WC (80 kW), controller MGM HBC 400 400, battery LiPol 80Ah, 360 V, cruising speed 170 km/h, flight time 90 min.

www.evektoraircraft.com



GRAMEX SONG LW/ E-SONG

A single-seat, carbon-fiber composite aircraft for the 120 kg category. Song complies with US Part 103, UK's SSDR and German 120kg categories. 22 aircraft have been built so far.

Span 11,2m, length 5,9m, wing area 10,50 m², empty weight 120 kg (e-Song 106 kg + 2x 13 kg battery), MTOW 235 kg, electric engine REX 30 (15 kW), controller MGM HBC 50063, battery Lion 140Ah, 50 V, maximum speed 140 km/h, flight time 40 min.

www.airsport.cz



HPH 304E SHARK

304e SHARK Certified FES (Front electric system) and foldable propeller offers to high performance glider HpH 304e Shark "self-retrieve" capability. 25 aircraft have been built so far.

Span 18m, length 6,79m, empty weight 340 kg, MTOW 600 kg, wing area 11,8 m², electric engine 23 kW, max. RPM 4500, battery LiPo GEN2, 15 kg, climb Rate with FES 1-2 m/s, cruising speed 100 km/h, range with FES 60-80 km, glide ratio 50+, min. sink rate 0,52 m/s.

www.hph.cz



JIHLAVAN AIRPLANES

SKYLEADER 400 ELECTRIC

Two-seat training aircraft suitable for both basic and recreational flying. The airplane is designed for environmentally friendly pilots and flight schools operating at the airports with the need to reduce noise pollution.

Span 9,20 m, length 6,4 m, wing area 11,47 m², basic empty weight with 2/4 battery packs 383/491 kg, electric engine MGM COMPRO RE80 (80 kW), controller MGM HBC 400 400, battery Li-ion 110Ah, 324 V, maximum horizontal speed 230 km/h, range on full battery 230 km.

www.skyleader.aero



PHOENIX AIR

D-14 PHOENIX ELECTRO

A composite structure, two seat, electric motorglider. The tail-dragger type landing gear is retractable. Two-blade adjustable/feathering propeller produced by Phoenix Air.

Span 14,46 m, length 6,50 m, empty weight 300 kg, wing area 10,08 m², electric engine RET 120 (35 kW), controller MGM HBC 280120, battery LiPol 50Ah, 120 V, speed V_H 220 km/h, cruising speed 180 km/h, glide ratio 36:1, flight time 40 min.

www.phoenixair.cz



ULTRALIGHT DESIGN

EGO TRIKE

EGO trike is light, fully composite one seater, or tandem, designed for ATOS gliders. Complies with German DULV 120 kg regulation.

Wheel track 1500 mm, wheel base 1700 mm, weight 33 kg, MTOW 213/320 kg, electric engine REX 30, controller MGM COMPRO 500 A, Battery-Twin Box 2x16,5 kg, together 33 kg, 156 Ah, safe voltage 58V, cruising speed 60-90 km/h (ATOS VR), minimum sink rate 0,8 m/s (engine off), flight time 120 min.

www.ultralightdesign.cz



E-GLIDER

E-GLIDER

This model is designed for those who enjoy thermal flying and need to take off from a flat surface. Thanks to the positioning system of the machine, it is possible to safely start from a flat surface and at the same time after the start - after taking up to the flight position with the help of electric positioning - take a „thermal“ position for perfect perception of the wing. The machine is equipped with a triple fold propeller that eliminates air resistance during a flying without the engine.

Electric engine NT-power 12/15 kW,
controller 63 V 250 A,
battery Li-ion 1890Wh 9,5 kg,
flight time 30 min, charging 1 hour.

www.e-glider.com

6 FLIGHT SIMULATORS

In the field of aviation for more than 100 years, systems for basic training in aeroplane operation have been developed. The new era of flight simulators was launched with the dawning of the age of jet aircraft. Further development continues up until the present connected to the growth in air transport and its commercialisation. The Czech aviation sector is a significant player on the global market. In connection with the top-of-the-range production of aircraft and components, Czech producers are proving themselves even in the field of flight simulators. Czech firms offer a unique combination of the perfect manufacture of hardware components, ensuring correct sensitivity and calibration to perfectly match the controls of an actual aircraft. Similarly, as with the hardware, it is necessary to pay the highest attention to the quality of software design. However, this field requires that the precise



handling qualities match those of an actual aircraft. A significant position on the Czech market in the field of flight simulator design is held by Zall Jihlavan Airplanes, manufacturer of Skyleader aircraft.

DID YOU KNOW?

In the Czech Republic we have more than 60 years of experience in R&D and production of simulator training systems. Over this period of time moreover 500 simulators and other flight training devices were produced.





ZALL LETOV SIMULÁTOR GP ONE SIMULATOR

This real flight model-based high-wing ultralight aircraft simulator with suspended motion is a unique device certifiable by EASA up to FNTP I designed for high-wing single piston engine aircrafts enabling an easy access to cockpit due to suspended motion, providing realistic simulation feeling, minimizing a training-related stress and increasing greater prestige for flight schools. It features with a real and fully functional instrument panel, fully functional controls, visual scenery of small and large airports including software support for designing own scenes.

www.letovsim.cz



ZALL LETOV SIMULÁTOR SL 600 SIMULATOR

This real flight model-based low-wing ultralight aircraft simulator with 4 DOF motion is a unique device certifiable by EASA up to FNTP I designed for low-wing single piston engine aircrafts. It provides realistic simulation feeling, minimizes a training-related stress and represents a highly effective tool in pilot training programs. It features with a real and fully functional instrument panel and controls, visual scenery of small and large airports including software support for designing own scenes and 2-channel 180° visualization.

www.letovsim.cz



ZALL LETOV SIMULÁTOR L410 SIMULATOR

The Let L-410 UVP aircraft FNPT II / FTD / FFS Flight Simulator represents a reliable and cost-effective flight training device. The system is designed for VFR/IFR training, cockpit procedures and conditonal training. The L-410 UVP Turbolet simulator consists of a realistic dual-seat pilot cockpit and of an instructor operating station. The cockpit can be modified under requirements of the customer and aircraft.

www.letovsim.cz

7 AIRCRAFT ENGINES



The production of aircraft engines has a long-standing tradition in Bohemia – the first Czech aircraft engine was built by the Prague-based company Breifeld-Daněk in October 1915. Over the almost 100 years of tradition of aircraft engine production in the Czech Republic, every category of engine has been manufactured. These include: piston, jet and turboshaft engines. In the past, the largest Czech manufacturer was the Walter-Motorlet factory, established in 1911. In 1923, it entered the market with its first engine. In 2008, the company GE Aviation bought the aviation part of the Walter factory and thus established the company GE Aviation Czech, which continues in this long and successful tradition of turboshaft engine development and production.

Another globally recognised Czech producer is PBS Velká Bíteš, which supplies a whole range of main propulsion units for aeroplanes, gliders and helicopters thanks to the top-of-the-range technology. Turbine engines from PBS Velká Bíteš are held in high esteem in the world in terms of performance and weight ratio. Presently, Czech companies manufacture dozens of aircraft engines every year. The majority of the products are exported – Czech engines turn up in aircraft practically throughout the whole world. The companies continuously work on development, striving to use the latest technical solutions and find new ones. For all kind of small aircraft there is Verner Motor, a world leader in the design and manufacturing radial engines.

DID YOU KNOW?

You will manage to build a simple aircraft in the garage of your home, whether it will be constructed from wood or duraluminium. However, building an engine requires definite experience and knowledge. The development and manufacture of engines is proof of the designers' and the industry's high level of skill. Only the most advanced countries in the world can manage to build the more challenging category of jet and turboshaft engines.

CZECH AIRCRAFT ENGINES - FROM PISTON TO JET AND TURBOSHAFT



Walter NZ-60
(Avia BH-5)



LOM M332
(Zlin Z-142)



Jet M701
(L-29 Delfin)



Turboshaft M601
(L-410 Turbolet)



Turboshaft GE H



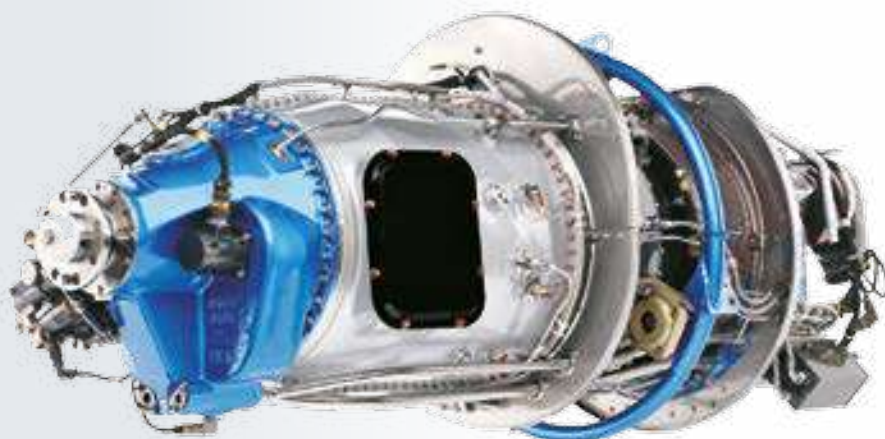
FLY ENGINE

F-200 EVO

The new model of our engine is a result of 20 years of continuous development and testing. It is a powerful air cooled two-stroke engine with high reliability, specially designed for paramotors and small light powered paraglider trikes with modern look in "V" position.

Volume 192 cc,
power 26 hp,
max. rpm 8000,
bore 66 mm,
stroke 56 mm,
reduction 3,1,
complete weight 12,9kg,
starter electric.

www.flyengines.com



GE AVIATION TURBOPROPS

GE H SERIES

The GE H Series engines combine enhanced performance and operability with maintenance simplicity to deliver rugged, reliable power for a range of applications all around the world. Rugged for a reason - Built to handle harsh conditions and extreme environments. Zero-fuel nozzles - Fuel slinger ring eliminates need for nozzle maintenance. No HSI required. 3D aero blade design for high efficiency and less fuel burn. 1,040 Thermo HP - for hot day take-offs and high altitude performance. Up to 4,000 hours TBO

Power output:
GE H75/H80/H 750/800/850 shp

www.geaviation.cz



PARMA - TECHNIK

MIKRON III

The Mikron III is an inverted in-line four-cylinder, four-stroke, OHV petrol air-cooled engine, with a downdraught carburettor. It is produced in several versions (A, B, C) - for light, UL and replicas of historic aircraft.

Mikron IIIC1:
Cylinder bore 95 mm,
piston stroke 96 mm,
total swept volume 2,72 litre,
take-off power 62 kW/84 HP,
max. cont. power 55 kW/75 HP,
weight 67,5 - 70,5 kg,
(depending on version)

Mikron IIIA version with 48 kW/65 HP is possible.

www.parmatechnik.cz



MGM COMPRO, ROTEXELECTRIC ELECTRIC PROPULSION SYSTEM MGM-RE 100+ HP

MGM COMPRO and RotexElectric have developed industrial electric propulsions for aircrafts, gliders, paraglides, multicopters etc. Units with 1kW-80kW have low weight, high performance and a long flight range.

Fully featured replacement for Rotax 912 100 HP:

measures 270x203 mm,

weight 22 kg

power (permanent) 80 kW

efficiency 92–96%.

Speed Controller:

measures 130x250x215 mm,

weight 4,9 kg,

power (permanent) 80 kW,

efficiency 99%.

www.mgm-compro.com



MVVS

MVVS 190 CN4

Two-stroke four cylinder gas engine with 190ccm displacement and 14,7kW power output.

Comes in two versions with bottom intake controlled by flap valves or with electronic injection unit EIU. We can customize the engine with an electronic starter, alternator and controller to supply power systems onboard and to charge onboard batteries and to extend the operating range.

The engine is suitable for a wide variety of UAV aircraft. Other UAV engines from the MVVS product range, particularly for use in demanding climatic conditions, can be made as a liquid-cooled engines or adapted to the use of alternative fuels.

www.mvvs.cz



PBS VELKÁ BÍTEŠ

TJ20U

Innovated small turbojet engine designed for UAVs, UCAVs, target drones and reconnaissance drones. It consists of a single-stage radial compressor, radial and axial diffuser, annular combustion chamber and single-stage axial turbine. Reaches up to 210 N thrust with the weight 2.1 kg. The engine is controlled by a digital electronic system. Starting is electrical, as well as the fuel pump.

Thrust: take-off (max 5 min) 210 N, outside diameter 121 mm, engine length 316 mm, weight (dry) 2100 g.

www.pbsvb.cz



PBS VELKÁ BÍTEŠ

TJ40-G1

A small turbojet engine TJ40-G1 has been developed for UAVs, gliders and bigger modeller applications.

Thrust: take-off (max 5 min) 395 N, outside diameter 147 mm, engine length 305 mm, weight 3200 g, generator power output 12 V - 200 W.

www.pbsvb.cz



PBS VELKÁ BÍTEŠ

TJ100

This small turbojet engine has been developed for light air vehicles, such as light and ultralight sports planes, sailplanes equipped with auxiliary engine, piloted vehicles of experimental class and various unmanned air vehicles. Since 2008 about 600 units of TJ100 have been delivered. In the category of small turbojet engines, TJ100 with thrust up to 1300 N ranks among the best in the world.

Max. thrust 1300 N, max. diameter 272 mm, engine length 625 mm, weight (dry) 19.5 kg, generator power output 750 W.

www.pbsvb.cz



PBS VELKÁ BÍTEŠ

TP100

TP100 is used as a gas generator that generates combustion gases for powering the free turbine and, via a gearbox (reducer), the propeller. The system is designed for use in both push and tractor configuration depending on its mounting position on the aircraft. Thanks to its low weight and 180 kW output the engine is an ideal solution for powering ultralight manned and unmanned aerial vehicles (UAV).

Shaft output 180 kW, propeller speed 2158 RPM, engine length 887 mm, width x depth 330 x 398, weight (dry) 61,6 kg.

www.pbsvb.cz



PBS VELKÁ BÍTEŠ

TS100

The TS100 is a modified variant of the turboprop engine TP100. The gearbox is modified for the operation with propeller blades. The system is designed for use in both push and tractor configuration depending on its mounting position on the aircraft.

Shaft output 180 kW,
shaft speed 5978 RPM (TS100ZA),
2158 RPM (TS100DA),
engine length 829 mm (TS100ZA),
881 mm (TS100DA),
width x depth 398 x 330,
weight (dry) 56.7 kg (TS100ZA),
62.6 kg (TS100DA).

www.pbsvb.cz



VERNER MOTOR

SCARLETT 7U

A seven-cylinder air-cooled radial with fuel injection and OHV valvetrain. Direct drive, propeller up to 220 cm (86 " inch) diameter. Dual ignition optional.

Diameter 800 mm,
length 600 mm,
complete weight (dry) 83 kg,
bore 92 mm,
stroke 90 mm,
volume 4740 ccm,
output 124 BHP (91 kW) @ 2300 RPM,
torque 390 Nm (288 fp) @ 2200 RPM.

www.vernermotor.com



VERNER MOTOR

SCARLETT 9SI

A nine-cylinder air-cooled radial with fuel injection and OHV valvetrain. Direct drive, propeller up to 220 cm (86 " inch) diameter. Dual ignition included.

Diameter 880 mm,
length 655 mm,
complete weight (dry) 108 kg,
bore 92 mm,
stroke 102 mm,
volume 6094 ccm,
output 158 BHP (116 kW) @ 2400 RPM,
torque 485 Nm (358 fp) @ 2000 RPM.

www.vernermotor.com

8 PARAGLIDERS AND PARAMOTORS



PARAGLIDERS

In the Czech Republic, there are several very successful companies, developing and producing paragliders. Every year, they introduce a range of new types, whose performance and other features surpass the previous one. These companies have given wings to three thousand paraglider pilots in the Czech Republic alone and tens of thousands of others the world over. This catalogue presents manufacturers of single-seater paragliders, top-notch racing paragliders, tandem paragliders and many kinds of special paragliders. You will find there also harnesses for paragliders.

PARAMOTORS

Paramotors manufactured in the Czech Republic meet the conception of the highest class of paramotors – ergonomics, sufficient performance, comfortable seating, low weight and above all safety. Czech companies are constantly working on development – thanks to this paramotors are manufactured using the latest technology ensuring high performance, low weight and high reliability. An emphasis is placed on maximum pilot safety – during take-off, landing and the flight itself. Many of the paramotors also have simple constructions, which make transport and availability of parts easier, thus allowing comfortable, quick and financially acceptable service.





AXIS PARAGLIDING COMPACT 3

pilot: ☐ beginner ☐ most experienced

Certification	EN/LTF-A
Take off weight (up to size)	75-120 kg
Span (up to size)	11,16-13,57 m
Trim/max. speed	37/54 km/h
Projected aspect ratio	3,63-4,90

www.axispara.cz



AXIS PARAGLIDING VEGA 5

pilot: ☐ beginner ☐ most experienced

Certification	EN/LTF-C
Take off weight (up to size)	40-135 kg
Weight of glider (up to size)	4,3-4,8 kg
Span (up to size)	10,92-13,43 m
Min./trim/max. speed	23/40/57 km/h
Projected aspect ratio	4,51
Glide ratio	11
Min. Sink rate	1

www.axispara.cz



AXIS PARAGLIDING VENUS 4

pilot: ☐ beginner ☐ most experienced

Certification	EN/LTF-D
Take off weight (up to size)	55-140 kg
Weight of glider (up to size)	4,5-5,4 kg
Span projected (up to size)	9,41-10,95 m
Min./trim/max. speed	25/40/60 km/h
Projected aspect ratio	4,9
Glide ratio	11
Min. Sink rate	0,9

www.axispara.cz



AXIS PARAGLIDING MERCURY 2 COMPETITION

pilot: ☐ beginner ☐ most experienced

Certification	Load Test
Take off weight (up to size)	67-140 kg
Span projected (up to size)	12,24-14,66 m
Min./trim/max. speed	25/43/68 km/h
Projected aspect ratio	5,41
Glide ratio	11
Min. Sink rate	0,9

www.axispara.cz



AXIS PARAGLIDING SIRIUS 2 TANDEM

pilot: ☐ beginner ☐ most experienced

Certification	EN-B
Take off weight	120-220 kg
Span	14,7 m
Min./trim/max. speed	23/36/50 km/h
Projected aspect ratio	3,7
Glide ratio	8,7
Min. Sink rate	1

www.axispara.cz



SKY PARAGLIDERS ANAKIS 3

pilot: ☐ beginner ☐ most experienced

Certification	EN/LTF-A
Take off weight (up to size)	55-125 kg
Weight of glider (up to size)	3,85-4,9 kg
Span projected (up to size)	8,59-9,8 m
Min./trim/max. speed (M)	38/24/50 km/h
Projected aspect ratio	3,81
Glide ratio	8,7
Min. Sink rate	1,15

www.axispara.cz



SKY PARAGLIDERS

EXOS

pilot: beginner most experienced

Certification EN/LTF-C
Take off weight (up to size) 65-120kg
Weight of glider (up to size) 3,9-4,4kg
Span projected (up to size) 9,47-10,37 m
Projected aspect ratio 4,92

www.sky-cz.com



SKY PARAGLIDERS

METIS 3 TANDEM

pilot: beginner most experienced

Certification EN/LTF-B
Take off weight (up to size) 100-220kg
Weight of glider (up to size) 7,3-7,9kg
Span projected (up to size) 11,47-10,06m
Min./trim/max. speed 24/39/46 km/h
Projected aspect ratio 3,95
Glide ratio 9
Min. Sink rate 1,2

www.sky-cz.com



SKY PARAGLIDERS

KEA MOUNTAIN

pilot: beginner most experienced

Certification EN/LTF-B
Take off weight (up to size) 58-130kg
Weight of glider (up to size) 3,15-3,7kg
Span projected (up to size) 8,85-9,9m
Min./trim/max. speed 23/37/50 km/h
Projected aspect ratio 3,81
Glide ratio 8,5
Min. Sink rate 1,15

www.sky-cz.com



GRADIENT

BRIGHT 5

pilot: beginner most experienced

Certification EN/LTF-A
Take off weight (up to size) 54-135kg
Weight of glider (up to size) 4,1-5,7kg
Projected span (up to size) 10,31-12,44m
Projected aspect ratio 3,67

www.gradient.cx



GRADIENT

GOLDEN 5

pilot: beginner most experienced

Certification EN/LTF-B
Take off weight (up to size) 75-135kg
Weight of glider (up to size) 4,8-5,5kg
Projected span (up to size) 8,92-9,67m
Projected aspect ratio 3,88

www.gradient.cx



GRADIENT

ASPEN 6

pilot: beginner most experienced

Certification EN/LTF-C
Take off weight (up to size) 65-135kg
Weight of glider (up to size) 3,7-5,5kg
Projected span (up to size) 9,33-11,07m
Projected aspect ratio 3,99

www.gradient.cx



GRADIENT BIGOLDEN 4 TANDEM

pilot: beginner most experienced

Certification	EN/LTF-B
Take off weight (up to size)	100-225 kg
Weight of glider (up to size)	6,9 kg
Projected span (up to size)	11,57 m
Projected aspect ratio	3,91

www.gradient.cx



GRADIENT FREESTYLE 3 ACRO

pilot: beginner most experienced

Certification	EN 926-1
Take off weight (up to size)	60-130 kg
Weight of glider (up to size)	4,3-5,2 kg
Projected span (up to size)	8,89-9,78 m
Projected aspect ratio	4,50

www.gradient.cx



MAC PARA TECHNOLOGY ELAN 2

pilot: beginner most experienced

Certification	EN/LTF-C
Take off weight (up to size)	55-180 kg
Weight of glider (up to size)	4,45-6,7 kg
Span flat (up to size)	11,79-15,57 m
Min./trim/max speed	23/39/56 km/h
Flat aspect ratio	6,27
Glide ratio	10,5
Min. Sink rate	1,05

www.macpara.com



MAC PARA TECHNOLOGY EDEN 6

pilot: beginner most experienced

Certification	EN/LTF-B
Take off weight (up to size)	55-145 kg
Weight of glider (up to size)	4,65-6,2 kg
Span flat (up to size)	11,28-13,97 m
Min./trim/max speed	23/38/52 km/h
Flat aspect ratio	5,91
Glide ratio	10
Min. Sink rate	1,05

www.macpara.com



MAC PARA TECHNOLOGY PASHA 6 TANDEM

pilot: beginner most experienced

Certification	EN/LTF-B
Take off weight (up to size)	110-220 kg
Weight of glider (up to size)	6,8-7,5 kg
Span flat (up to size)	14,35-14,95 m
Min./trim/max speed	24/37/47 km/h
Flat aspect ratio	5,25
Glide ratio	9,7
Min. Sink rate	1,1

www.macpara.com



MAC PARA TECHNOLOGY CHARGER PPG

pilot: beginner most experienced

Certification	DGAC, EN/LTF-B
Take off weight (up to size)	77-240 kg
Weight of glider (up to size)	5,3-6,6 kg
Span flat (up to size)	10,44-13,2 m
Min./trim/max speed	24/48/60 km/h
Flat aspect ratio	5,14
Glide ratio	8,9
Min. Sink rate	1,1

www.macpara.com



SKY PARAGLIDERS

GII 3

Certification EN / LTF
Pilot's height (up to size) 150-215 cm
Harness weight (up to size) 2,45-2,8 kg

www.sky-cz.com



SKY PARAGLIDERS

REVERSE 4

Certification EN / LTF
Pilot's height (up to size) 200 cm
Harness weight (up to size) 2,9 kg

www.sky-cz.com



SKY PARAGLIDERS

SKYLIGHTER 3

Certification EN / LTF
Pilot's height (up to size) 163-210 cm
Harness weight (up to size) 3,2-3,4 kg

www.sky-cz.com



SKY PARAGLIDERS

TRANSFORMER

Certification EN / LTF
Pilot's height (up to size) 160-200 cm
Harness weight (up to size) 4,37-4,83 kg

www.sky-cz.com



MAC PARA TECHNOLOGY

CAPTAIN

Pilot's height 178 cm
Max. load 120 kg
Harness weight 4,6 kg

www.macpara.com



MAC PARA TECHNOLOGY

HAVEN

Pilot's height 165-200 cm
Max. load 120 kg
Harness weight 5,45 kg

www.macpara.com



MAC PARA TECHNOLOGY

LEVITY

Pilot's height 165-185+ cm
Max. load 120 kg
Harness weight 3,75 kg

www.macpara.com



MAC PARA TECHNOLOGY

MANIX

Pilot's height 165-185+ cm
Max. load 120 kg
Harness weight 5,45 kg

www.macpara.com



MAC PARA TECHNOLOGY

PASSENGER

Pilot's height 175-185 cm
Max. load 120 kg
Harness weight 2,3 kg
Passenger Airback weight 2,8 kg

www.macpara.com



NIRVANA SYSTEMS

F-LIGHT

The lightest Nirvana paramotor with a weight about 20 kg and a static thrust over 60 kg, enabling comfortable take-offs and landings for very light pilots. It is equipped with a harness with low hang points with precise settings for every pilot. Equipped with two engine units FIT 160 and FIT 200 and two variants of frame and propeller 115 and 130 cm.

Engine FIT 160 and FIT 200 (23-27 hp, 6500 rpm), static thrust up to 65 kg (according to the propeller), tank 10 l, recommended pilot weight 50-100 kg, machine weight with the harness: 20,5 kg (160cc/115 cm version).

www.nirvana.com



NIRVANA SYSTEMS

INSTINCT

The most advanced model from Nirvana is rather suitable for experienced pilots. Paramotor uses lightweight composite materials, aerodynamic frame profile, propeller central bolt, comfortably designed harness. It is produced in three engine variants 160, 200 and 230 cc and in two variants of glider suspension, with lower and upper hanging points.

Engine NS230 (32 hp, 7000 rpm), static thrust up to 83 kg (depending on the propeller), tank 14 l, recommended pilot weight 60-150 kg (170 kg tandem), machine weight incl. harness 29-32 kg.

www.nirvana.com



NIRVANA SYSTEMS

RANGER

Paramotor specially developed for nature conservationists in national parks. It combines Rodeo safety features such as a solid frame and laminated skeleton and innovative features from Instinct - a comfortable seat, a throttle start / stop button, a powerful NS230 engine, a disconnected battery detector and more.

Engine NS230 (32 hp, 7000 rpm), static thrust up to 80 kg (depending on the propeller), tank 10 l, recommended pilot weight 60-160 kg (170 kg tandem), machine weight incl. harness: 30,5 kg.

www.nirvana.com



NIRVANA SYSTEMS

TRIKE CRUISE CARBON

Trike with braked front wheel. It uses the soft suspension of the parachute as pilot protection, the axles absorb most of the hard landings. Used materials: Carbon sandwich rear axle, laminated skeleton, aluminum casted wheels, drum brake integrated into the front wheel, stainless steel frame.

Weight 21,8 kg, load capacity 175 kg, use for paramotors: Instinct, Rodeo, Ranger.

www.nirvana.com



PARAELEMENT

TRIKE CARGO THOR 250

A fully dismountable trike with MTOW 280 kg and dry weight 58 kg. Switch to a classic foot-launch PPG within 15 minutes. The 20" BMX wheels enable the craft to take off from virtually any surface. Specially adjusted harnesses provide hours' long comfortable flights. Auxiliary „A-riser bar" on top of the trike frame helps to rise the wing during take-off. Centrifugal clutch with oil lubricated reduction gear ensure minimum power losses.

Engine Polini Thor 250 Evo (37 hp), tank 16 l, consumption 3,8 l/h, take-off weight 280 kg, empty weight 58 kg.

www.paraelement.cz



PARAELEMENT

THOR 200

The most universal foot launched PPG for both racing and hobby pilots suitable for leisure flying or pylon racing. Comfortable harness with low attachment points and swivel horns enable precise weight-shift control and perfect pilot's unity with the glider so important for every flight. Centrifugal clutch with oil lubricated reduction gear ensure minimum power losses.

Engine Polini Thor 200 Evo (29 hp), tank 16 l, consumption 2,6 l/h, take-off weight 170 kg, Machine weight incl. harness: 32 kg.

www.paraelement.cz



SJ PARAMOTORS

JENIFER R220

A foot-launch PPG with the R220 engine is suitable for advanced pilots or coupling with auxiliary undercarriage. Electric starter with battery charging and voltage regulator. The frame is made of thin-wall seamless tubes treated with powder paint (komaxit).

Engine HE Paramotors 212 ccm (27 hp), tank 7,5 l, consumption 3,5 l/h, machine weight incl. harness 32 kg, MTOW 130 kg.

www.paramotors.cz



SJ PARAMOTORS

TRIKE JENIFER

The undercarriage is designed to go with both types of foot launched PPGs. It has a low center of gravity and wide main wheel-gauge, which provides for great stability. Large bantam wheels enable safe operation from rough surface. The frame is made of thin-wall seamless tubes treated with optional powder paint (komaxit).

Engine HE Paramotors 212 ccm (27 hp), tank 7,5 l, consumption 3,5 l/h, machine weight incl. harness 42 kg, MTOW 130 kg.

www.paramotors.cz



SPIN PARAMOTORS

SPIN 180 E

Paramotor with electric starter. Electric ignition. Aluminium, stainless steel, five parts foldable body frame.

Engine FS 180E (27 hp), static thrust up to 75 kg, tank 13,5 l, recommended pilot weight 70-170 kg, machine weight 27 kg.

www.spinparamotors.com



WALKERJET

XC 200 EVO 110

Paramotor with electric starter, powered by the latest models of our own engines developed and produced specially for use in paramotoring. Simple tubular aluminium chassis. The frames are easily replaceable in case of damage.

Engine F 200/45 (27 hp), tank 12,5 l, recommended pilot weight 60-100 kg, machine weight 23 kg, endurance 3,5 h.

www.walkerjet.cz

PARACHUTES AND RESCUE SYSTEMS



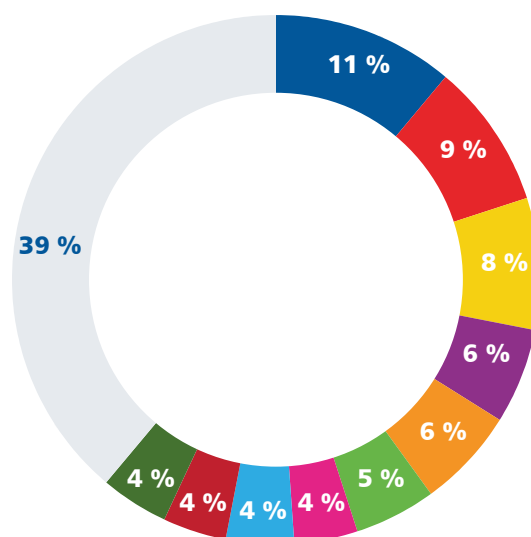
PARACHUTES

The manufacture of parachutes in the Czech Republic includes the total production of parachutes, reserve parachutes and other equipment for skydiving. Companies manufacture several dozens of parachute types – for military purposes, sports, the main canopies for sports skydiving, reserve parachutes, training parachutes and rescue parachutes. A range of companies from this field have the international patent for their products and comply with the strictest standards.

RESCUE SYSTEMS

The Czech Republic is among the leading producers of rescue systems for aircraft – three out of the five main producers in the world are from the Czech Republic! The latest product is a parachute for drones, which is the first of its kind in Europe and one of the first in the world. The parachute for drones includes a unique mechanism to activate it. Instead of the currently used mechanical spring, it is activated by explosives.

EXPORT OF PARACHUTES, INCL. DIRIGIBLE PARACHUTES AND PARAGLIDERS, AND ROTOCHUTES FROM THE CZECH REPUBLIC IN 2017



Source: Czech Statistical Office, H56: 880400

- France
- United States
- Switzerland
- Germany
- Slovakia
- Hungary

- India
- Italy
- Serbia
- Slovenia
- Others

Total exported amount: 8,297 ths. EURO

Thus the parachute will be deployed in an extremely short time, within

a second. Thanks to this mechanism the parachute will slow down to an appropriate drop speed from 70 cm. In addition to the method and speed of activation, the parachute has a very low weight of 350 grams. Either the operator or autopilot can decide to use the parachute. The parachute is able to save not only the drone but also the technology it carries. During an accident, it thus saves at least tens of thousands of crowns, mostly hundreds of thousands. The benefits of the parachute for drones are even more noticeable when flying over populated areas.





MARS OVP-12 SL

Parachute OVP-12 SL is used by paratroopers for mass jumps from military aircrafts and helicopters. The special cargo system is available to use with releasing before landing. Maximal weight 160 kg. Completed with reserve ZVP-80.08.

www.marsjev.com



MARS REAL - X

The container and harness Real-X is used for sport skydiving. Real-X is mainly suitable for free falls, RW and swooping.

www.marsjev.com



STRATOS 07 JU - 40

Emergency Parachute for Pilots – versions seat and back position.

Canopy area 40 m²,
weight of parachute without portable bag 6,5 kg,
vertical descent speed at load G-100 kg 5,5 m/s,
forward speed 2,5 m/s,
turn by 360° 12 s,
maximal permitted loading 105 kg,
maximal permitted speed 278 km/h,
tested with 126 kg load at speed of 335 km/h
by AKČR methodology according to TSO C 23 d norm.

For army use: maximal permitted loading 120 kg,
maximal permitted speed 280 km/h.

www.stratos07.cz



MARS ATL-15

Emergency parachute

Canopy area 36 m²,
Max. parachute mass (with metal parts H395 + H 323) 6,4kg,
Average vertical descent speed
(at load G = 122 kg) up to 7,1 m.s⁻¹,
turning by 360° 8,6 s,
Max. operating weight 122kg,
Max. operating speed (at the moment
of the container opening) 278 km.h⁻¹,
min. allowable altitude of the use 100 m AGL
at the aircraft speed 110 km.h⁻¹,
environmental immunity from - 40 to + 93,7 °C.

www.marsjev.com

GALAXY GRS, s.r.o.

www.galaxysky.cz

Galaxy GRS, s.r.o. is the biggest European producer of parachute ballistic systems for Ultralights, L-LSA, UAV, VLA, Experimental aircraft, Gyroplanes, Helicopters and Drones, for speeds up to 400 km/h (216 kt) with a maximum weight up to 1640 kg.

The company exports 70% of European market with various modifications and ways of use. Thanks to more than 30 years of experience - since 1984, the GRS systems are constantly updated and enhanced. Our company does not pursue development of parachute only for high speeds, but during the long path of development and testing, the company paid special attention to quick opening in low speeds enabling a safe rescue from the lowest possible heights.

According to the world statistics most accidents occur in low heights and low speeds. To reflect this reality a completely new design of parachute was tested and acquired patent in USA (US 7 997 535 B2) and patents for Gyroplanes and Helicopters (25106 and 25218) in Czech Republic. In 2015 the new ballistic rescue system GBS10 for Drones up to 35kg was developed.

Ever growing number of customers testifies not only to the product quality but about a good marketing and service as well. We can proudly announce that the number of successful rescues has already reached 92.



STRATOS 07, s.r.o.

www.stratos07.cz

Ballistic recovery systems and rescue parachutes for:

- UL, S-LSA, GA, gliders, experimental aircraft
- gyroplanes and helicopters,
- paragliding, powered-paragliding, hang-gliding,
- drons (UAV),
- balloons.

More than 30 years of experience in manufacturing of parachutes and aerial products.

Ballistic recovery systems Magnum are capable of supporting weights up to 2,3t.

The company offers 7 different types of rocket engine for more precise and reliable function.

The world's first recovery system for gyroplanes and helicopters.



U.S.H., Ltd.

www.ushrescue.com

Since 1994 the U.S.H. Production of Rescue Systems is developing, producing and providing after sales support to the ballistic deployed parachute systems. They use for their operation energy of a rocket motor. While the majority of USH's BR systems were installed in the UL aircraft, currently a system for aircraft of the LSA category, so widespread in the USA, is being developed. It has to cater for the higher, 600kg weight. The parameters and quality of the already developed and approved products of the USH are being constantly upgraded. They are also approved by the Czech LAA authority and by the German DULV, while the pyrotechnic components are also approved and conform to Czech and German regulations. Since 1994 the USH regularly participates at the Aero Friedrichshafen fair.



10 RESEARCH & DEVELOPMENT, UNIVERSITIES



The current trend is the intense cooperation with the private sector. This approach makes the research more market-friendly with the emphasis placed on the experimental research. Consequently, the added value in the technological innovations is ensured. Currently, the research and development is mostly financed from private business sources. Highly specialised scientific and development centres and scientific-technical parks have been established where tailor-made R&D has been developing intensely, guaranteeing the quick innovation transfer. This makes the Czech companies highly competitive. The main foreign investors supporting R&D in the field of aerospace industry are Honeywell Technology Solutions (HTS CZ) and GE Aviation Czech. Other foreign investors and key players in Aerospace are Bell Helicopter, Latecoere Czech Republic, Precision Castparts CZ and Zodiac Galleys Europe.

INNOVATIVE AND DESIGN SOLUTIONS

Thanks to the innovative ideas and unique technical solutions,

CZECH TECHNICAL UNIVERSITY

www.cvut.cz/en

Study of the aerospace engineering, air transport, aircraft guidance and control, space technology with using the latest knowledge of science and technology. Collaboration with foreign universities in the field of aviation.

INSTITUTE OF AEROSPACE ENGINEERING IN BRNO

www.lu.fme.vutbr.cz

The comprehensive solution of demanding research tasks both in the field of grant-funded projects and in contractual research for industry partners. A broad team of specialists and top-of-the-range technical equipment available.

FACULTY OF MILITARY TECHNOLOGY, UNIVERSITY OF DEFENCE IN BRNO

www.unob.cz/fvt

Use of simulation technology in the preparation of flight specialisation students and the development of partial components of flight operation systems.

VSB - TECHNICAL UNIVERSITY OF OSTRAVA, FACULTY OF MECHANICAL ENGINEERING – INSTITUTE OF TRANSPORT, INSTITUTE OF AIR TRANSPORT

www.id.vsb.cz/o-nas/ustav-letecke-dopravy

Study programmes in the field of air transport.

Czech companies are also supplying some of the aerospace industry's major global players such as Airbus, Boeing, Embraer, and Gulfstream. Czech companies succeed on foreign markets through the high quality of manufacture, innovative technological solutions

and the emphasis placed on the design, speed and reliability. The leading development and manufacturing Czech companies are for example Evektor, PBS Velká Bíteš, Czech Aerospace Research Centre (VZLU).

AVIATION STUDY

The Czech Republic has more than a hundred years of tradition in study programmes focused on aviation. At present, the Czech Technical University in Prague and the Brno Technical University are especially involved in the study of aviation and astronautics. Incredibly extensive scientific, research and development activities responding to the specific needs of flying in practice are underway.



5M LEVIT, s.r.o.

www.5mlevit.cz

5M LEVIT s.r.o. is an ENGINEERING CONSULTANCY. The company is focused on the analysis and design of structures in aviation, railway and machinery. Our engineers have extensive experience in the development and testing of general aviation aircraft. The goal is to provide the customer with a simple solution with more options. Only a simple solution looks good, works safely and is easy to manufacture and maintain.

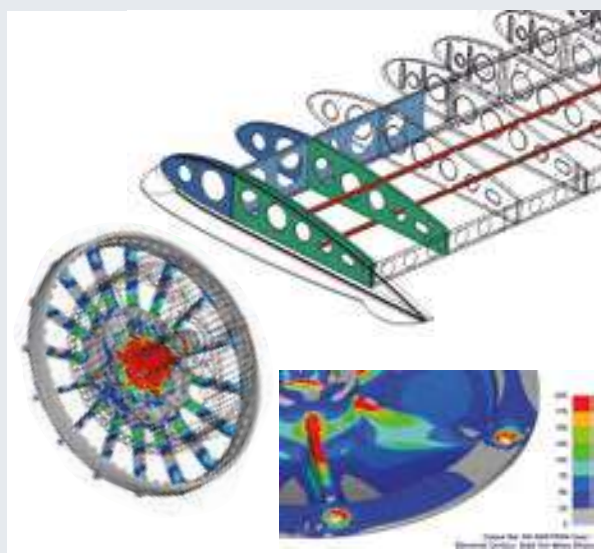
5M LEVIT s.r.o. provides a solution for QUALITY SYSTEM ASSURANCE according to Part 21 requirements for production and design organisations. Similar to DOA and POA certification, the company helps to certify your aviation products.

Engineering:

- structural and load analyses,
- flow analyses,
- design works.

Quality system assurance:

- solution for POA and DOA,
- product certification management.



BEKO ENGINEERING, spol. s r.o.

www.beko-engineering.cz
www.catia.cz

The company is 100% subsidiary of BEKO Engineering & Informatik GmbH & Co KG. Focused on Engineering, Project Management, CAD development, design etc. and providing the PLM solutions. BEKO is reseller of company Dassault Systèmes in Czech Republic for CATIA, ENOVIA, DELMIA and added services like CATIA training academy, implementation, it support and advisory services in PLM area.

Competencies in PLM:

- CATIA V5, V6, 3DEXperience,
- composites Design and Manufacturing preparation,
- aerospace sheetmetal design,
- surface design.

Competencies in engineering:

- airframe design,
- installation of avionic systems,
- assembling and manufacturing jigs,
- galleys, stowage systems,
- partitions, cabin trims,
- project management.

- prototype / serial,
- CATIA V5, V6, Siemens NX, Creo, Solidworks, AutoCAD.

Projects:

- L-159A,
- L-159B,
- L-159T1,
- AE 270,
- S76 C+ Sikorsky,
- CS300,
- SC100.

Technology Services:

- "wired" know-how for technology projects,
- complete solution from "one hand".

Consultancy: strategic & operative:

- "branch specific know-how" in areas of plm/product lifecycle management, technical research & design and engineering.

CONAIRSYSTEM, s.r.o.

www.conairsystem.com

- Certification Support in the field of engine, APU and small aircraft certification (CS-E, CS-APU, CS-23).
- Engineering services in the field of aircraft, engines and automotive design using a 3D CAD software system.
- Feasibility studies in the field of aircraft/ engine development projects.
- Performance analysis and optimization in the conceptual and preliminary design phase.
- Safety analysis of aircraft engines and aircraft in compliance with the certification requirements.
- Stress and dynamics analysis of selected sections of airframes and engines, support of vibration measurement on rotor systems.

Projects:

Hybrid aircraft propulsion concept combining conventional piston engine and electrical motor propulsion units in a push-pull configuration.

New line of aircraft reciprocating engines applying the latest aviation and automotive design concepts improving the performance and cost effectivity.



EVEKTOR, spol. s r.o.

www.evektor.com

Evektor is an international company with more than 40 years of experience. The company belongs among the leading engineering and manufacturing companies in the Czech aerospace industry. Besides aviation Evektor has extensive development activity also in the automotive and engineering industry.

Apart from developing its own aircraft, such as the two-seat aircraft SportStar/EuroStar, four seat VUT100 Cobra and twin-engine turboprop EV- 55 Outback for transport of 9-14 passengers, Evektor is also a supplier of design and development works for the European aerospace industry and is involved in several European research programs.

Company activities:

- Development of aircraft and aviation technology
- Development of automotive technology
- Industrial Design
- Aerodynamic analysis
- Static and dynamic analysis
- Rapid prototyping



GRYF DESIGN

www.gryfair.cz

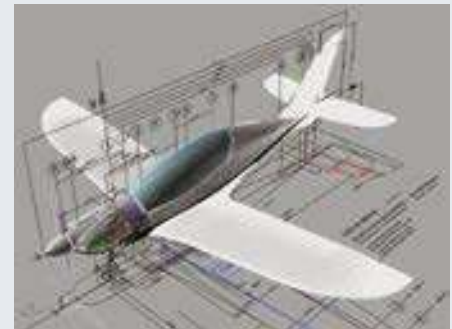
Design, development and styling of light sport aircraft

Free group of professional aircraft enthusiasts, created aircraft designs for more producers – from first sketches to its documentation, prototype production, arranging of suppliers - till the type certification and preparing of serial production.

200 planes of our design are flying around the world - from one-seat Gryf ULM-1 with stall speed 45 km/hour, Skyboy with stall speed 55 km/hour designed for Interplane sro, its US LSA version for Interplane USA with smaller wing, all-metal UL and LSA type certificated strutted high-wing MD3 Rider with 1,17m wide cockpit, flying 220 km/hour, till our last serially produced baby named Shark – UL aircraft, touching 300 km/hour of max level speed and for this year prepared all-metal high-wing project MD9 for Tomark aero company.

Proof of concept Gryf P27 is flying, trying to find serial producer, Shark has some world speed records, first pieces delivered - and type certification in process and MD3 Rider is back in production – under flag of Italian Next-Aircraft.

Our next designs can use an access and parts from the line of our approved designs.



TC INTER-INFORMATICS, a.s.

www.inter-informatics.cz

One of the foremost autonomous aerospace engineering companies in Europe. Airbus Subcontractor.
EASA Part 21J.361 Design Organization Approval.

Aircraft Design, Modification and Upgrades:

- Feasibility Studies,
- Concept Design,
- 3D Design & 2D Drawings,
- Stress Analysis,
- Technical Documentation,
- Certification,
- Production Support,
- Installation Support.

Services for Airlines, MROs and Leasing Companies

- Modification to existing fleet,
- Partnership with Chinese MRO companies (GAMECO, AMECO Beijing, STARCO).

Design services for cabin interior manufactures:

- Galleys,
- Stowage,
- Partitions,
- Ceilings,
- Pelmet.

Inter-Informatics Group:

Prague, Plzen, Povážská Bystrica, Beijing, Mobile, Hamburg, Munich, Toulouse, Bucharest



C-spacer:

The lightweight class divider is the first manufactured product fully developed in-house. It is located beneath the overhead stowage compartments and fixed only to seat tracks.

- Designed for A320 and B737
- Quick & easy installation
- Many colours and surfaces
- Several configuration options: IFE, USB slot, power outlet, or just an advertising panel
- 50-inch pitch between BC & EC seats
- Extra leg room
- Interchangeable LH/RH

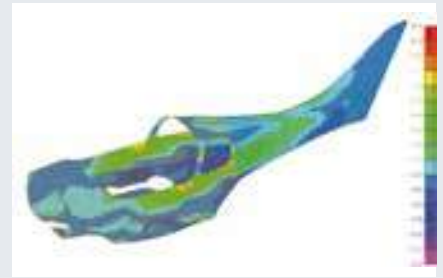
VANESSA AIR, s.r.o.

www.vanessaair.cz

The company activities are aimed especially at the design and calculus work for the UL and sports aircraft and includes:

- preliminary design and design studies of aircraft;
- design using CAD (Solid Works);
- stress calculations (FEM NASTRAN);
- aerodynamic calculations;
- consulting;
- design of both static, stress and flight testing procedures.

The company specialises in design and calculation of composite aircraft.



VZLU - CZECH AEROSPACE RESEARCH CENTRE

www.vzlu.cz

- Certification of aircraft or gliders flutter resistance based on the ground vibration testing and flutter analyses in accordance with various regulation standards as LTF-UL, CS-LSA, CS-VLA, CS-22, CS/FAR-23.
- FE analyses, structure analyses and computing, material analyses.
- Structural testing - static and fatigue testing, test of landing gears, test of metal and composite structures, coupon and material testing, bird strike tests, NDT testing.
- CFD computations and simulations, flight mechanics, optimisation, aircraft and UAV/UAS aerodynamic design.
- Affordable 3m wind tunnel testing.
- Composite structures design and infusion technologies development.
- Turbine engine testing and engineering, combustion research.
- Corrosion engineering, mechanical and climatic testing.
- Design, manufacturing and testing of nanosatellites and space products.



AEROSPACE DEPARTMENT AT THE CZECH TECHNICAL UNIVERSITY IN PRAGUE

The Czech Technical University in Prague (CTU in Prague) is one of the most important and respected Czech technical universities. Since 1926 it trains aviation engineers and also carries many high-level scientific, research and development activities in the realm of aerospace, undertaken at the University departments (faculties) - the machine engineering, electric engineering and transport engineering.

These departments have a number of specialized sites, serving the need of University as working as needed for the aerospace industry R&D, and for the air transport.

The Czech Technical University in Prague offers the following aviation-related courses of study:

- Aircraft Desing / Aircraft Engine Desing
- UAV Design
- Space Technology
- Air transport
- Professional pilot
- Operation and control of air transport
- Aircraft maintenance techniques

Activities of the CTU in Prague in the field of aviation:

- design, research, development and manufactory of light sports aircraft,
- research of unique propulsion unit for light sport aircraft – ducted fan,
- development of UL-39 Albi airplane with unconventional power plant,
- ground vibration test and flutter analysis of light sports aircraft and gliders,

www.cvut.cz
<http://aerospace.fsik.cvut.cz>
<http://uld.fd.cvut.cz>
<http://measure.feld.cvut.cz/cast>

- research, development and design of aero engines and light fan propulsion,
- research and design solutions for cases of spatial flow in applications of external and internal aerodynamics, including the flow in curved channels,
- research and development of avionic system for small sporting aircraft,
- research and development of aircraft simulators,
- the research and development of a budget autopilot for small transport aircraft,
- Glonass and Galileo systems receivers,
- aerodynamics and mechanics of flight,
- aerodynamic design of airfoils for airframes and propellers,
- strength and life of aircraft structures,
- composite materials and composite structures.



BRNO UNIVERSITY OF TECHNOLOGY INSTITUTE OF AEROSPACE ENGINEERING

www.lu.fme.vutbr.cz
www.fme.vutbr.cz

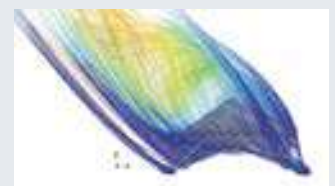
The Institute of Aerospace Engineering (IAE) is a young progressive team of professionals working at the Brno University of Technology (BUT), Faculty of Mechanical Engineering. The basic mission is to provide education in bachelor studies "Professional Pilots" and master studies Mechanical Engineering in specialization "Aircraft Design" and "Aeronautical Traffic". As a part of education we also provide professional courses and pilot trainings up to the ATPL qualification within the BUT Flying school. Furthermore, we provide Ph.D. studies for young researchers.

Our core activities are R&D and commercial services for industrial partners focusing on aviation technology development, equipment testing in approved laboratory and consulting services. We have broad knowledge and extensive experience in aerodynamics (incl. CFD and optimization), modern space technologies and materials, strength and life of aircraft structures issues, reliability analysis and safety assessment for aircraft systems, ground and flight testing, and also in the economic aspects of the aircraft development. An important asset of the IAE is the test facility with the Czech CAA certificate for static and fatigue testing of aircraft structures.

Examples of projects with IAE participation:

- Development of ballistic recovery system of the GALAXY Co. for Unmanned Aerial Vehicles (UAVs);
- Research / Qualification testing for space devices for Mars lander project (ESA);

- Cooperation with the Jihlavan Co. on the development of hydraulic components for small transport airplanes.
- Cooperation on development of EV-55 light transport aircraft with Evektor Co.;
- Cooperation on development of new generation of G304 TS high-performance all-composite two-seater glider with the HPH Kutna Hora Co.;
- Development VUT 061 Turbo aircraft for the PBS Velka Bites Co. (flying laboratory for testing the TP100 engine);
- Cooperation on development of TL-4000" Single-engine, 4-seater, composite aircraft - kit" with the TL-Ultralight Co.;
- Cooperation on the EU projects: CESAR, DATON, CELPACT, PPLANE.



11 AVIATION COMPANIES



The Czech aviation industry is well represented by large companies such as Aero Vodochody or Let – Aircraft Industries which developed such renown aircraft as the L-29 Delfin, L-39 Albatros or L-410 Turbolet, but

also by many companies making smaller, yet equally well-made aircraft, such as the Evektor EV-97 Eurostar, TL-2000 Sting Carbon or Bristell to name a few. Such a high-quality production requires a matching supply

of components made by other local companies, many of which make parts for foreign aircraft makers, too. The Czech Republic boasts first-class producers of propellers, instruments and avionics, as well as companies specializing at machining, sheet metal or fiber-glass parts, hydraulics systems production, etc. Engine makers make up for an entire chapter of their own. The aviation world just wouldn't be complete without companies supporting flying operations by creating aviation information products or providing maintenance services to aircraft, from small private light-sport to large carriers operated by international airlines. An alphabetical list of Czech aviation companies follows.

Location of aviation companies in the Czech Republic, presented in this brochure.



5M, s.r.o.

www.5M.cz

5M Company is SME manufacturing company which specializes in composite production and bonded sandwich structures. 5M Company was awarded as "Company of the Year 2010" in Czech Republic, which corresponds with our strategy to be the leading company in composite industry in the Czech republic. Our slogan "Smart technologies in the world of composites" shows our effort to develop the right products and materials for each customer.

5M Company develops and produces structural epoxy adhesives for extra strong joints, epoxy resins for production of fibreglass components, pultruded composite profiles, semipregs (as substitute to prepreg technology) and sandwich constructions (from composite or aluminium). Except the production of raw materials, 5M company is active in the field of the final composite parts production. The product assortment covers composite sandwich panels for trains (interior walls), fibreglass parts for aircraft (interior panels, fuselage parts, wheel covers), radome for antennas, bulletproof equipment or carbon parts for skies. Whole company covers strong and innovative R&D department with own laboratory, 140 employees and more than 5000 m² production space.

Main products:

- epoxy adhesives for high strength gluing,
- epoxy resins for production of fibreglass components,
- pultruded composite profiles,
- sandwich panel constructions with honeycomb core inside.



A2 CZ, Ltd.

www.ellipse-spirit.com

Since 2005, our company has been specializing in the design and construction of the side-by-side two seat low wing aircraft "Ellipse Spirit" with T-tail and retractable landing gear made of carbon fiber and honeycomb sandwich.

The airplane has been primarily designed for UL and LSA markets. Aircraft Ellipse Spirit is characterized by excellent flight properties and high strength, allowing it a turbulence penetration speed of 257 km/h. We look forward to meeting you during the demo flights.



ABS JETS, a.s

www.absjets.cz

With an international team of more than 200 professionals, a fleet of 8 business jets under commercial operations and a comprehensive portfolio of services offered worldwide, ABS Jets is one of the largest private aviation companies in Central and Eastern Europe.

ABS Jets operates from headquarters located at Václav Havel Airport in Prague and its other base at Bratislava Airport. It offers aircraft management day-to-day support from hangarage and crew management, right up to the technical maintenance or flight planning. The company is a EASA Part 145 certified MRO and Embraer Authorised Service Centre providing 24/7 worldwide AOG support, line and base maintenance, Avionics upgrades, interior refurbishment and other one-stop-shop services including:

- paint and machine shop,
- aircraft wheel and battery repair shop,
- composite workshop.

It is also Continuing Airworthiness Management Organisation (CAMO) offering support for Embraer (Legacy 600/650, Phenom 100/300), Gulfstream (G550, G650) aircraft types registered in EASA and other countries.

ABS Jets holds all the necessary authorisations of the EASA Part 145 organisation, as well as other countries such as Russia, Aruba, Isle of Man, Turkey, United Arab Emirates, Bermuda, Cayman Islands, and Kazakhstan.



AERO VODOCHODY AEROSPACE, a.s.

www.aero.cz

AERO Vodochody AEROSPACE a.s. is the largest independent aerospace company in the Czech Republic with 1900 employees and 180 mil USD turnover (in 2015). Aero's businesses include jet training and combat aircraft production and life cycle support, advanced aerostructures integration and design & development services.

Aero is AS 9100 certified, holder of POA (EASA Part 21 G), DOA (EASA Part 21 J), MOA (Easa Part 145) approvals, and operates NADCAP certified processes (Heat Treatment, Composites and Non-destructive Testing).

Key programs

Defence & MRO:

- development of L-39NG, new generation of legendary jet trainer,
- development, production and life cycle support of L-159 combat and training system,
- life cycle and operation support of L-39/L-59.

Aerostructures and Design programs:

- risk-sharing partnership on design, production and certification of Embraer KC-390,
- risk-sharing partnership on design, production and certification of Bombardier C Series,
- airbus programs – A321 fuselage panels for Finmeccanica; A320 main landing gear side-stays for Messier-Bugatti-Dowty; E-Bay Doors for A320 for Stelia Aerospace; subassemblies for A320, A330 for Premium Aerotec; A350 and A400 subassemblies for MT Aerospace,
- production of S-76 helicopter and cockpits for UH-60M and S-70i Black Hawk for Sikorsky.



AEROMECH, spol. s r.o.

www.aeromec.cz

Flight training centre for ultralight aircraft and general aviation Training on certified Piper Meridian simulator with Garmin avionics Aircraft rental and management. Hangar space rental at Kunovice Airport



Aeromec company, established in 1993, is a flight training centre for light aircraft and general aviation. In modern premises at Kunovice airport we also offer training on certified Piper Meridian simulator with Garmin avionics. Further we provide aircraft rental and management and we offer hangar spaces at Kunovice Airport.

AEROPILOT, Ltd.

www.aeropilotcz.com

The company AEROPILOT is a Czech manufacturer of the ultralight LEGEND 540 aircraft which is suitable for sport and recreational flying as well as for tourism. Its excellent behaviour means that this aircraft is also suited for flight training of beginners. The LEGEND is a very comfortable, stable and easily operated high wing airplane that will impress you with its great flying characteristics and performances, smooth take-off

and landing. The other advantages of the LEGEND airplane are a very spacious crew cabin, a perfect view from the cabin and a luxurious leather interior. Spacious doors enable comfortable entry and baggage handling. The adjustable seats ensure an optimal position for pilots of all heights. The cruising speed of the LEGEND aircraft is 210 km per hour.



AEROPROFIL

www.aeroprofil.com

Company Aeroprofil was founded with the aim to produce dural-aluminium ribs for the ultralight aircrafts. Nowadays in addition to that, AEROPROFIL offers manufacturing services like an assembly and repair of aviation parts as well as selling of nuts and bolts. Coming soon a re-launch of ultralight aircraft the Allegro 2000.



AEROSPOOL CZ, Ltd.

www.aerospool.cz

Aerospool CZ, Ltd. is a company concerned in development, prototype building, testing and services for ULL producers.

Manufacturer of welded (TIG) metal structures, such as engine bearers, undercarriage legs, fuselage frames.

Producer of wheels and brakes, parts for landing gear and control systems and special bolts.

Sale of componets and parts for homebuilders.



AIRCRAFT INDUSTRIES, a.s.

www.let.cz

Aircraft Industries, a.s. is the only Czech maker of transport aircraft, building on the long-standing tradition of the former company LET Kunovice. Since 1936 we have produced more than 8000 aircraft of various types. The company currently employs about 1000 people. Russian industrial holding UMMC has been the companies' only owner since August 2013.

Main company activities are:

- development, manufacture, and sales of the turboprop L 410 UVP-E20 aircraft,
- service and maintenance of the L 410, spare part sales, aircraft modification and modernisation,
- research and development; subcontracting,
- operating Kunovice's private international airport and aviation high school.



AIRLONY

www.airlony.com

AirLony company is specialized in the field of design, construction and production of light aircraft. Company started its production in 1998 with UL biplane HIGHLANDER, which has among others outstanding strength properties and G-limits. Since 2004 AirLony has been producing its latest airplane – SKYLANE UL, the really ultralight aircraft with high useful load and roomy luggage compartment. In combination with high cruising speed, long flying range and enjoyable flying characteristics the Skylane UL is the best solution for wide range of usage – from trainer to long distance tourer. AirLony also provides services and support in design and construction of composite materials.



AIR TEAM

www.airteam.cz

AIR TEAM is among the leading companies engaged in the field of avionics industry, was formed in May 2008.

AIR TEAM provides solutions and services for our customers in the following area of avionics and aviation systems:

- System design and engineering
- Integration, modifications, upgrades and installations into airborne platforms

- Sales
- Maintenance and repair
- Logistics support and coordination
- Special subsystem development and production

AIR TEAM targets the Central, Eastern Europe markets and employs experts for each product type.



AIRZONE.TV / CUMULUS MEDIA, Ltd.

www.airzone.tv

Cumulus media Ltd. is a privately owned media company producing and broadcasting news, reportages and documentary films covering the wide scope of aviation – sports, industry, business, reviews, air-shows, travel stories, etc.

We have been broadcasting since April 1, 2014 and our activity is not limited only to the Czech Republic.



ATEC, v.o.s

www.atecaircraft.eu

ATEC is one of the Czech leaders in production of advanced UL and LSA all-composite aircraft since 1992. All components are designed and produced by the factory itself just from the moulds to the complete aircraft. The first, very light plane in serial production was legendary and still popular ZEPHYR. The most advanced models are all-carbon ATEC 321 FAETA and its latest version ATEC 321 FAETA NG, both designed also for 600kg MTOW. Its aerodynamic purity and sophisticated wings design assure excellent flight characteristics, manoeuvrability, exceptional performance and speed range 54-290 km/h, flight range up to 2000km and low consumption. Planes are ideal for touring and also flight schools. FAETA is certified for aerotow up to 750 kg. Atec also offers specials like ATEC 212 SOLO and prototype of amphibious OMSIDER. All planes are hand-made and customized based on wide offer of optional equipment. More than 600 Atec planes are flying in many countries worldwide.



AURA, a.s.

www.auranet.cz

Joint stock company AURA was set up in 1995 by merging of several prominent companies, operating a number of years in the field of industrial diagnostics and electronics. The main activities include the development, manufacturing and supplying of equipment for technical diagnostics and monitoring of machines, technology control systems, elements of industrial automation and special sensors. Some of our main products are: vibration sensors, rotation speed measurement, machine condition monitoring, airborne diagnostic systems, communication systems, etc.

Basic activities:

- diagnostics of aircraft jet engines,
- bearing condition diagnostics,
- condition monitoring of gear boxes,
- measurement of vibration and operational status of aircraft engines,
- RTCA DO 160 device as a replacement for the original diagnostics sets of aircraft engines AI 25TL, TV 3-117,
- monitoring helicopters bearings and gearboxes using acoustic emission.



AVIA PROPELLER, s. r. o.

www.aviapropeller.cz

Avia Propeller s.r.o. main activities:

- R&D, manufacturing, overhauls, service and Sales of aircraft all metal in flight pitch changeable propellers designed both for piston engines of 140 up to 600 HP and turbines of 603 up to 1820 SHP, used on regional aviation, agricultural, general aviation, sport and aerobatic aeroplanes;
- licensed blade and spinner manufacturing for historical propellers made by world famous US company UTC Hamilton Standard, designed for „Warbirds“ P-51 Mustang, T-6 Texan, Junkers etc.;
- high quality products certified in Czech Republic, USA, Russia and in many of European, Asian, Australian, Central and South American countries;
- world-wide export activities;
- Sales and repair service center in USA, Canada, Venezuela;
- system of quality management according to ISO 9001 implemented.



AVION - PATRIK SAINER

www.aerobaze.cz

Czech Republic and Slovak Republic VFR Flight Guide:

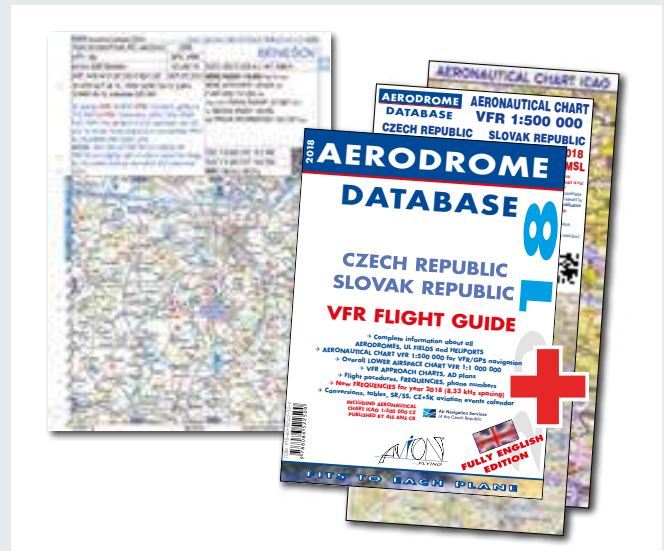
- detailed and up to date information about more than 240 Czech and Slovak aerodromes, UL fields and heliports;
- AD plans, VFR APP charts, flight procedures;
- essential publication for each VFR flight and aero-touring;
- quality spiral binding;
- fully english edition;
- regularly updated each year.

Including charts:

- aeronautical chart VFR/GPS 1:500 000 CZ+SK,
- lower airspace chart VFR/GPS 1:1 000 000 CZ+SK,
- aeronautical chart ICAO 1:500 000 CZ.

Order on-line: www.aerobaze.cz/pilotshop:

- secured on-line payment available,
- next day dispatch,
- shipped over to all European countries at low fares.



BETAKOM, s.r.o.

www.betakom.cz

Universal, electrical flaps actuator UFA-900L offers to the pilot not only more comfort but also increases the security.

During operation with mechanical flaps there are possible unwanted changes of the flight attitude caused by:

- insufficient space in the cockpit,
- flaps lever is too long or in improper position and therefore abrupt flaps setting.

The positions of the electrical flaps depending on the aircraft model are easy programmable by everyone. There are only 2 buttons on the backside of the control unit for programming the requested flaps positions. When the flap positions are programmed, the compact electrical actuator brings the flaps in the correct position by a simple change of the lever position.

The LED-indicator of the last flaps position lights until the next resp. requested position is reached. During this time flashes the LED-indicator of the requested position given by the lever. If the force exceeds the programmed limit (e.g. by flaps setting during too high flight speed), the flaps return to the previous, lower position. Also reaching of this flaps position and the activation of the security system is indicated by the LED-indicator and so is the pilot advised to his mistake.

Because of reliability reason, for the changing the flaps position instead of an electrical switch we have used a mechanical lever which position is checked by 4 Hall-sensors (non contact switch).



BLANIK AIRCRAFT CZ

www.blanik.aero

Blanik Aircraft CZ was settled in 2014 as subsidiary of Blanik, Ltd. Company, which is owner of all Blanik type certificates and started its support for all Blanik gliders and new production of L23 Super Blanik. This two-seat glider of all-metal construction is designed for basic and advanced pilot training. In the past it has been produced more than 6000 Blanik gliders including modifications and they are operated in many countries around the world.



BRM AERO, s.r.o.

www.bristell.com

BRM AERO is a family company, that manufactures the Bristell light sport aircraft. The company was founded by Milan Bříšťela in order to produce the best aircraft in this category. Thus he capitalized on almost 30 years of experience in aerospace production.

BRM AERO is able to build and realize all kinds of modifications according to customer's requirements. One of the top priorities are innovation and continuous development of aircrafts.

Bristell are designed with increased rigid cockpit to ensure maximum crew safety. Thanks to the correct ergonomics they are the best choice for a long flight. Very good flight characteristics are appreciated by both beginner and experienced pilots. All metal planes are available in 3 types - retractable landing gear, a classic tricycle and a tail wheel. More than 350 aircrafts have been built so far and exported to more than 50 countries around the world. The standard warranty and post-warranty service is provided for each Bristell aircraft.



CARBON DESIGN, s. r. o.

www.carbondesign.cz

CARBON DESIGN s. r. o. is focused on the development and production of advanced composite parts, including design, suggestion and preparing of production processes, production of moulds and jigs and ensuring serial production mostly with applications in the aviation and automotive industries.

As a part of group of Czech companies leaded by one owner, we work in great team of people, deeply experienced in their fields. We have ISO 9001 certification and use sophisticated system of production and stock. Time effective production with strong system of quality controls is important for us.

Our own final product is UL aircraft FM250 Vampire.

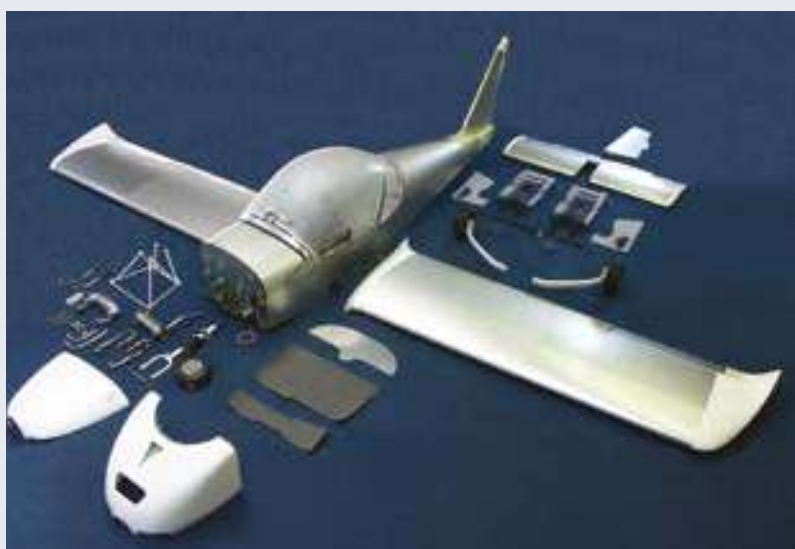


COMLET, s.r.o.

www.comlet.cz

Many years of experience in the manufacture of composite parts of aircraft primary structure. The main specialty is the production of composite landing gear for airplanes of the UL, VLA and LSA category. In this branch our company is the world's biggest producer, with regard to the number of undercarriages sold. We offer all stages of production from model, mould to the final product.

Applied Technologies: hand laminating (vacuum) tempered and inject technology (RTM). Materials: Glass, carbon, aramide, sandwiches or other hi-tech composite material applications.



COMPOSIT AIRPLANES spol. s r. o.

www.compositairplanes.cz

COMPOSIT AIRPLANES is company with over 25 years long tradition and experience in production of strength composit components parts for aviation industry and many other industries.

At present it has about eighty employees and production facilities with about 4500 square meters of floor space. The company owns a 5 axel CNC milling-cutters and laminating (impregnation) machine.

COMPOSIT AIRPLANES had successfully built all around the world customer chain – e.g.: Diamond Aircraft Industries, SAAB, Shiptec, ZALL JIHLAVAN airplanes, FAIVELEY TRANSPORT CZECH.

We prefer an individual approach to each customer and we aim to fulfill all their wishes.



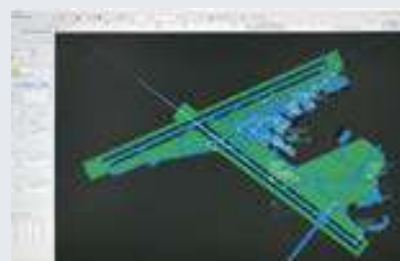
CS SOFT, a.s.

www.cs-soft.cz

CS SOFT a.s. was established as the first Czechoslovak private company dealing with the development and production of air traffic control software. CS SOFT has established a strong and stable team of highly skilled professionals and experts. CS SOFT has currently a wide spectrum of customers all over the world. The most signifiant references are: Air Traffic Control in the Czech Republic, Lithuanian Oro Navigacija, Slovenian Air Traffic Control, CAA in the Philippines and IAA Izrael.

CS SOFT a.s. provides:

- Systems for Air Traffic Control (ACC, APP/TWR)
- ATC Simulation
- ATM Consultancy
- Supporting systems for airports and ground services
- Systems for industrial and IT monitoring



CZECH SPACE OFFICE

www.czechspace.cz

The Czech Space Office (CSO) is the national information and advisory centre for space opportunities and activities in the Czech Republic. CSO follows national activities, analyses opportunities for Czech academia and industry in ESA programmes and evaluates level of national results. CSO provides consultancy to interested research and industry actors concerning space programmes and activities in Europe and elsewhere. The Office offers help in projects preparation, advises SMEs to incorporate into international high technology networks and to search for partners in international space projects. It supports relationships between research and industry.



CZECH SPORT AIRCRAFT, a.s.

www.czechsportaircraft.com

Czech Sport Aircraft is located in Kunovice, one of the most important centres of Czech aviation heritage. The company is focused on the research, design, development and production of Light Sport Aircraft intended for basic and advanced flight training, general recreational use and air tourism. Thanks to the state-of-the-art products offering the highest standards of safety, superior performance, easy maintenance and low life cycle operating costs, Czech Sport Aircraft has positioned itself among the market leaders within the Light Sport Aircraft segment of the General Aviation market.

Company holds both the Production Organisation Approval and the Design Organisation Approval issued by European Aviation Safety Agency (EASA).

Current production of Czech Sport Aircraft comprises the PS-28 Cruiser and the SportCruiser Light Sport Aircraft. Almost 650 units have been already produced and delivered to customers in more than 30 countries all around the world.



CZECH AIRLINES TECHNICS, a.s.

www.csatechnics.com

Czech Airlines Technics, a.s. focuses on the repair and maintenance of aircraft and aviation technology in the following areas: base maintenance (B737, A320FAM, ATR), line maintenance (B737/757/767, A320FAM/330, ERJ170/190, ATR42/72), components maintenance, engineering, landing gear overhaul/repair and CAMO and DOA services. The main competitive advantages are long-time tradition, quality of work and a team of experienced certified mechanics. The company has more than eighty years experience in aircraft maintenance in hangar and fifty years experience in the maintenance of jet aircraft. The headquarters is located directly at the Václav Havel airport in Prague.



DIRECT FLY, s.r.o.

www.directfly.cz

The company specializes in small-scale production and development of lightweight all-metal aircraft. The company has been on the market for over a decade and currently produces ALTO 912TG Ultra Lightweight Monoplane and develops two other types of sports aircraft. Direct Fly also offers Technology Transfer. In this product the customer is provided with:

- Complete drawing/technical documentation
- Staff training
- Technical support

This package is a fast and very economical option for launching licensed production in any country.

Beside ALTO 912 TG, the company offers production capacities related to the aluminum alloy material such as:

- 3-axes, 5-axes milling
- Pressing
- Chamfering
- Other forming methods

Engineering department of the company is capable of CAD modelling, design, and analysis of lightweight structures.



DOVA AIRCRAFT, s.r.o.

www.dovaaircraft.cz

DOVA Aircraft s.r.o. is production – sales company. In 1997 a new division for technology of aircraft production, DOVA Aircraft CZ, was added to the company line.

The DV-1 Skylark project was a collaboration of experts in aeronautical engineering, technical universities and production utilizing modern technologies to create a simplified method of building aircraft.

This unique production method improves the building efficiency and time to completion of the DV-1 Skylark aircraft. It also provides a wide range of delivery options – from basic kit to „ready to fly” aircraft so a DV-1 Skylark aircraft is available to you whatever your economic or time possibilities.



DISTAR CZ, a.s.

www.distar.cz

DISTAR CZ, a.s., continues in a production of the famous Samba XXL and Lambada aircraft via its production division DISTAR AIR. The production team consists of highly qualified specialists with extensive experience in the aviation industry which guarantees to make products of a very high quality.



EVEKTOR–AEROTECHNIK, Inc.,

www.evektoraircraft.com

Evektor-Aerotechnik is one of the world's biggest producers of light sport aircraft, with almost 50 year of manufacturing experience, EASA Part 21 certified production (POA + DOA), 300 employees and fleet of 1 400 aircraft delivered to 50 countries globally.

The company is producer of EASA certified pilot training aircraft SportStar RTC, LSA / UL aircraft Harmony LSA / EuroStar SL and twin engine turboprop for transportation of 9 – 14 passengers or cargo EV-55 Outback.

Evektor-Aerotechnik is equipped with the latest CNC machinery and manufactures aerostructures, machined parts, and interiors for civil and military aircraft, supporting programs of Ae-270, L-39NG (aerostructures), L-410NG (production jigs, wing and interior design), Airbus A-320 (aircraft interiors).



F AIR, spol s.r.o.

www.f-air.cz

We can teach you to fly, whoever you are. From successful executives looking to fulfill a childhood dream, to young people pursuing a professional pilot's career. We teach men and women of all ages, backgrounds, and nationalities. At the moment, we have students of over 40 different nationalities enrolled in our programs. We can help aspiring professionals secure their first piloting position, and we also support hobbyists by providing a range of aircraft to rent for recreational flying, be it solo acrobatics or a trip with friends and family.

We are currently one of the largest flight schools in Central and Eastern Europe and have so far trained over 1,600 pilots from more than 40 countries. We offer a wide range of training courses, from relatively undemanding ultralight airplane licenses all the way to the threshold of airline pilot courses, the pinnacle of aviation certification. All our training complies with EASA PART-FCL regulations. Our friendly staff stands ready to help you throughout the course of your training, whether you are working towards a personal leisure license or a professional career in the cockpit.



FLYWAY

www.flyway.cz

FLYWAY s.r.o. is the biggest flight school in Czech Republic and one of the biggest in Europe focused on autogyro licenses. Based in former military airport in Přerov we provide full theoretical and practical training to obtain Czech pilot license together with radio

and medical licenses. At this time we are ready to offer Czech autogyro license for foreign citizens as well.

Airport Přerov-Bochoř

Airport Plzeň Erpužice



GE AVIATION TURBOPROPS

www.geaviation.cz

We are the turboprop division of GE Aviation, a world-leading provider of aircraft engines and related components and systems.

In Prague, Czech Republic, we design, develop and manufacture turboprop engines in the 750 to 850 shaft horsepower (shp) range for business and general aviation aircraft. These engines called GE H Series are delivering rugged, reliable power for a range of applications in more than 20 countries all around the world.



HONEYWELL INTERNATIONAL, s.r.o.

www.honeywell.com

Honeywell offers capabilities in space span a range of systems, services and technologies for a wide variety of applications. Also provides subsystems in support of the International Space Station and a variety of satellites in Europe and the United States. With nearly five decades of experience in next-generation guidance systems and radiation hardened solutions Honeywell delivers accuracy, reliability, flexibility and maximum capability. Applications include launch vehicles and satellites while the systems integration capabilities result in significant cost and operational savings for the customers. We have a wide range of technologies and solutions that include Miniature Inertial Measurement Units, Reaction Wheels and High Performance Gyros.



HPH, Ltd.

www.hph.cz

HpH Ltd. is a company long established in the aviation industry. Having been involved with initial construction of the Diamond Dimona, Katana, and more recently the mighty EB29, HpH have gained a reputation for exceptional engineering build quality and attention to detail. HPH have taken all of this knowledge, design & manufacturing know-how to produce a highly competitive sailplane with the »all-new« HpH

Shark series. Introducing new dimensions to gliding, and producing a refreshing alternative to the established competition, HPH have already shipped over 100 Shark gliders to customers worldwide, including North America, Canada, Australia and throughout Europe.

Our sailplanes:

304C WASP - 304S SHARK - 304S JET SHARK - 304e SHARK
304MS SHARK - 304TS TWIN SHARK



CHARVÁT AXL, a.s.

www.charvat-axl.cz

Hydraulic cylinder and aircraft undercarriage designing and manufacturing.

Our aircraft product range includes:

- sport aircraft undercarriages,
- undercarriages for small transport aircraft,
- main parts of undercarriages,
- precision machined parts - aircraft engine and spring assembly components and propeller parts,
- aircraft rescue system parts - mechanical parts of universal rocket motors of aircraft rescue systems.



IVANOV AIRCRAFT, s.r.o.

www.ivanovaircraft.com

Ivanov Aircraft has 20 years of experience in development and production of UL, LSA and light aircrafts. Company provides the full design and manufacturing process, from the first idea to the flying prototype including documentation for certification and serial production.

Design and engineering:

- conceptual design of aircraft, UAV, drones, VTOL, STOL and other vehicles;
- aerodynamic analysis and design;
- flight loads according to following regulation: UL-2, LTF-UL, F2245, CS-LSA, CS-VLA, CS-23, FAR-23;

- structural analysis and design by analytical methods and FEM;
- technical documentation;
- flight and maintenance manuals;
- 3D CAD model.

Fabrication:

- flying prototypes;
- mock-ups for exhibitions;
- special high standards composite production;
- composite moulds.



JAROSLAV SEDLÁČEK UL-JIH

www.uljih.cz

Manufacturer Jaroslav Sedláček UL-JIH is engaged in complex services in ultralight aviation: produces 3 types of UL aircraft, provides maintenance, flying school and other related services. He was involved in creation of two very successful aircraft – Fascination and Evolution, which are even today main part of the offer. More than 200 pcs of Fascination were sold till today.

Establishing of Fascination a.s. in 2010 was reaction to the situation at the market – the new company became an exclusive investor of Jaroslav Sedláček and simultaneously took over all commercial and marketing activities. Present delivery time takes about 4 months for a single aircraft.



JIHLAVAN, a.s.

www.jihlavan.com

JIHLAVAN, a.s., is a Czech traditional partner for development, production and MRO of hydraulic components for aviation industry. We currently employ 225 members of staff by revenues of 10,8 mil USD in 2017.

The hydraulic components according to our own design are used in L39 Albatros, L159 Alca, L39 Next Generation, L410 Turbolet and L410 New Generation.

We take part in the supply chain of Airbus by BTP production of complete hydraulic actuators in recent

years. Since 2009 we industrialise the complete production including all special processes, assembly and test for Airbus A350 actuators, Airbus A400M actuators and Eurofighter Typhoon actuators.

Besides of our traditional products - hydraulic actuators, we focus as well on production of complex aviation parts including approved material supply, precise machining, and NADCAP approved NDT's and special processes.



JIHOSTROJ, a.s.

www.jihostroj.com

JIHOSTROJ a.s. – design, development and manufacturing of:

- jet and turboprop engines fuel control systems and fuel pumps,
- APU fuel control systems, including the most advanced electronic control solutions,
- propeller control systems for reciprocating and turboprop engines,
- full range of airframe fuel system components,
- fully integrated production base,
- maintenance, repair, overhauls,
- aerospace Built-To-Print production,
- aerospace license production.

Certifications:

AS 9100 Rev. D, EASA Part 21, EASA Part 145, FAA Part 145, NADCAP



JMB AIRCRAFT, s.r.o.

www.jmbaircraft.com

With over 25 years of experience in the flying business, JMB Aircraft redefines ultralights with the VL3 Evolution. Its Belgian owners apply the highest quality standards in both development and production, through the use of certified parts or top quality carbon fibre composite materials. Today the company has 85 employees with the production capacity of 60 aircrafts per year and worldwide distribution network in Europe, the USA, Canada, Australia, New Zealand and Middle East.



JOJOWINGS s.r.o.

www.jojowings.com

Established: 1992
Number of employees: 10
Yearly production: 200
Export: 80%

Actual production programme of paragliders:

- Instinct - beginners paraglider
- Phenom - powered paragliding
- Quest - tandem

Skydiving products:

- HOP 330 - tandem
- HOP Multi - student
- Sonic - student - advanced
- Raptor - advanced - expert
- XF 15 - expert



KAŠPAR A SYNOVÉ – STROJÍRNA KALMAR

www.kasparaero.cz

The company Kaspar was established in 1990 as a machinery enterprise with concentration on precision machinery production, namely as supplier of parts, assemblies and prototype production for bigger machinery enterprises.

The system of operation and production management in our company makes it possible to deliver high-grade products without regards to the number of products being manufactured.

The predominant part of production is carried out on CNC machine tools – milling, turning, wire cutting, in connection with programming system on DNC network. For the manufacture are used also classical machines, namely for grinding, thread rolling, keyway slotting, gear milling. Our company has at disposal more than 30 machine tools. A separate part of the company engaged in the development and manufacture of various gearboxes for racing use. The entire production is controlled on our checking workplace.

Serial production of parts for ultralight aircraft started since 1997, we now offer more than 200 standard parts and many custom versions. Thanks to our own development we are able to deliver exactly the parts according to customer needs. As the main groups are supplied the landing wheels, brake systems, propellers, control levers, mechanical parts of control.



KRILL.B.P., s.r.o.

www.krillbp.com

Since 1995 is our company specializing in production of sandwich glass, aramid or carbon parts and assemblies. KRILL.B.P. is divided in two divisions, RC models and Aero. In RC models division more than 5000 pieces of composite jet and aerobatic model kits has been manufactured and delivered to customer all over the world. Younger Aero division focus on production of composite parts for, but not only, aerospace and UAVs. We can cover complete process from design through functional prototypes to serial production. Our customers include Aircraft Industries (interior parts), Bell Helicopters (covers), Zlin Aircraft (interior and exterior parts), VR Group (interior and exterior parts for simulator), New Space Technologies (UAV) and many more.

Technologies used: Hand lay-up, vacuum bagging, RTM Light



KUBÍČEK AIRCRAFT

www.kubicekaircraft.cz

The company Kubiček Aircraft Ltd. was established in 2009. It is focused on development and manufacturing of UL and LSA aircraft. In addition to already produced low wing M-2 Scout airplane there is under development

M-4 Irbis airplane with STOL characteristics. The aircraft is designed for operation on short unpaved runways. The first flight of the prototype took place on September 11, 2015.



BALÓNY KUBÍČEK spol. s r.o.,

www.kubicekballoons.cz

Kubíček Balloons is currently the third biggest manufacturer of hot-air balloons and airships in the World, producing complete balloon systems – envelopes of up to 14 200 m³ volume, baskets for 2 to 32 passengers, burners and other balloon equipment. Kubíček also developed its own special polyester balloon fabric. All production is EASA certified, including various special shaped balloons.



LOM PRAHA, s.p.

www.lomp Praha.cz

LOM PRAHA s.p. is the leading company specializing on the Mi helicopters lifecycle support in the NATO and EU countries certified by the Russian MVZ Mil and OAO Klimov companies, the Interstate Aviation Committee MAK and domestic aviation authorities. Unlike many competitors, we can offer comprehensive services associated with overhauls, i.e. a complex support of the aviation technology lifecycle. Our experienced staff, utilization of advanced technologies and emphasis on top quality can be considered our greatest competitive

advantage Our company focuses on complete overhauls, upgrades and modernizations of Mi-8/17/171/24/35 helicopters and their dynamic components TV3-117/VR-14/VR-24/APU lifecycle support.

We also provide pilot trainings (Mi-17/L-39) in our Flight Training Center and a tactical pilot trainings on simulators in our Tactical Simulation Center. VR Group, a.s., the company's subsidiary, is providing the complex solution regarding the simulation technologies.



LOM PRAHA TRADE, a.s.

www.lomtrade.cz

LOM PRAHA TRADE is engaged in trade in the field of helicopter (airframe) maintenance of the Mi Series helicopters, maintenance of engines, gearboxes and other aggregates, training of flight and ground staff providing spare parts for maintenance of helicopters and their aggregates.

Of equal importance is specialised training of pilots for foreign partners and NATO. We focus on training new pilots, improving the skills of trained, cabin and ground crew members in accordance with the requirements of our customers, in co-operation with our affiliated company VR Group, which represents the pinnacle in all areas of simulation.

The Company is the youngest wholly owned subsidiary of the state enterprise LOM PRAHA.



MAMBA AIR, s.r.o,

www.mamba-air.cz

MAMBA AIR, s.r.o, is an exclusive importer of the CH-7 Kompress and CH-77 Ranabot helicopters of Italian manufacture for the Czech Republic, Slovakia and Poland. Mamba Air s.r.o imports, assembles, services and commissions the UL helicopters already 13 years. During that period we have amassed a large volume

of experience with this type of helicopter. It was not an experimental machine, but a respected factory-built machine respected the world over, able to operate as reliably as the larger ones. Over 70 machines produced are a testimony to its quality.



MARS, a.s.

www.marsjev.com

Company MarS a.s. is the biggest manufacturer of pilot emergency parachutes ATL range in the Middle Europe. All ATLs are designed, tested and manufactured beyond EASA's ETSO requirement and provide the maximum in safety and control.

The versatile harness, slow descent and easy packing makes the ATL range parachutes the perfect choice for anybody.



MESIT HOLDING, a. s.

www.mesit.cz

For more than 65 years, we have developed and produced highly specialised products and systems. Their quality is verified in the most demanding sectors, such as aviation or military industry.

Design and development of aircraft instruments – embedded systems, hardware in accordance with RTCA DO-160, software in accordance with RTCA DO-178.

Logistic support for aircrafts including deliveries of spare parts, modernisation of airports.

Mechanical parts for aircrafts – aluminium investment casting including machining, NDT testing and surface treatments, certification according to AS EN 9100, rev. C.



MGM COMPRO

www.mgm-compro.com

MGM COMPRO Company is focused on production and development of top-of-the-range solutions for industrial applications of BLDC a PMSM electric motors. We also develop and produce tailor-made products and import high-quality industrial batteries.

Unique Battery Management Systems (BMS) for energy storage in battery systems, industrial chargers etc. are also our spheres of activity.



MIKROTECHNA PRAHA a.s

www.mikrotechna.cz

Our purely Czech company is engaged in the development, manufacture, testing and servicing of aircraft instruments mainly based on membrane and gyroscope technologies. The product range is considerably wider and covers the following groups of instruments: artificial horizons, turn indicators, altimeters, vertical speed indicators, airspeed indicators, pitot-static tubes, pressure gauges and switches, control and signal units, warning and lighting systems. In addition, we cooperate with significant domestic and international companies from different industries in order to supply them with both precision machined parts and complex assemblies.



MVVS, spol. s r.o.

www.mvvs.cz

Since 1953 MVVS has been engaged in the research, development, design and production of internal combustion petrol engines for aircraft models. Since the year 2000 develops and manufactures engines and complete units for use in UAVs for commercial and military use. Our other focus is on the development and own production of BLDC electric motors and its accessories.

MVVS is a very successful brand, has won several world championships including the prestigious F3D category and was the holder of numerous speed world records. MVVS engines are successfully fitted into the UAV aircrafts, both in Europe and beyond.

Customers who have more than 60 years of preference for the MVVS brand, highly appreciate precision machining, high performance, durability and reliability of our engines and fast service.



NAV FLIGHT SERVICES, s r.o.

www.nav.cz

NAV Flight Services® was established in 1992 and has been focused on the research and development on the flight planning software - NAVsystem® since 1998.

NAVsystem® belongs to the newest generation of flight planning software and has been developed not only with respect to the rules and regulations, but mainly with the accent on the customer's satisfaction.

NAVsystem® is designed to provide fully optimized flight plans for a large number of aircraft types operating world-wide. The system applies manufacture's performance data against weather data to produce fast, accurate and optimum flight plans. Advanced planning tools help you with the flight cost optimization.

In addition to the flight planning system, NAV Flight services® has utilized its years of experience in the aviation - Education & Training center - NAVacademy®.

NAVacademy® offers complete training for dispatchers, including special courses based on client requirements. The training aims to link theory and practice.

The company also offers supervising - NAVjet®, where it provides all services for general aviation flights.



NEW SPACE TECHNOLOGIES, s.r.o.

www.newspacetechnologies.cz

NST builds on the long tradition of aviation industry in the Czech Republic and can guarantee the high-quality work of engineers who have experience with many projects such as Ae-270 Ibis, Raven 257, EV-97 VLA, Sportstar EPOS, VUT 100, L-410 NG or EV-55.

We use the latest technology and practices for our work. We always come up with an effective and individual approach to each project.

NST is mainly focused on the aircraft design and the UAV development but also on general engineering including 3D and 2D data management. We effectively use design and analytics tools optimized for each task. We also provide the development of technical documentation and the subsequent processing of 3D models.

NST activities:

- design and optimization,
- stress analyses and layouts,
- documentation/blueprints,
- tools design,
- avionics design,
- system and electrical design,
- development of testing methods.



NIRVANA SYSTEMS, s.r.o.

www.nirvana.cz

Nirvana Systems s.r.o. is a successful manufacturer of paramotors, trikes and accessories for more than 15 years. The Ongoing development continues to ensure its success among the most elite PPG equipment in the world.

The main features of our philosophy are: safety, reliability and technical support. Nirvana Systems has sold over 3500 paramotors worldwide and now having strong network of some 40 dealers in almost 35 countries.

Everybody can choose from our wide paramotor portfolio – Solid evergreen Rodeo, precisely designed machine Instinct for advanced pilots, machine used in anti poaching campaigns Ranger and lightest machine F-light with static thrust over 60 kg.



NT-POWER.EU

www.nt-power.eu

Producer of BLDC motors and supplier of complete electric propulsion systems for air and land using. Since 2008 we have dealt in development and production of sophisticated and electric drive for motor paragliding. Since then, we have run a long way on which we made several variants of drives which are ideal not just for aviation applications.

We use the latest BLDC (brushless) technologies of sensor motors. For controlling we use the latest "alternating" regulators and 32bit ARM microprocessors. There is an advanced charging method and intelligent BMS, (battery management system).

Our objective is to provide a reliable, efficient, long-life, ecological and user-friendly (plug in) system for the drive, which does not require any special skills for controlling, or user discipline, while it provides sufficient reserve of capacity.



OK AIRCRAFT SERVICE, s.r.o.

www.ok-aviation.cz

Our technical service facility specializes in technical support for ultralight and general aviation aircraft. From simple 100-hour inspections up to complete glass cockpit installation, our team will manage all your technical needs. Through our direct affiliation with several aircraft and equipment manufacturers

and cooperation with renowned Part 145 shops, our customers have access to full scale of capabilities and technologies. While other technical shops focus on bigger and more profitable business aircraft, we remain the "general aviation people". If your aircraft needs technical help, come to see us.



ORBIS AVIA, spol. s r.o.

www.orbisavia.cz

Located at Hradec Králové Airport (LKHK) in the Czech Republic, (one-hour drive east from Prague), ORBIS AVIA has over 19 years' experience performing maintenance AMO/ CAMO and designing and manufacturing rugged aircraft.

ORBIS AVIA is a manufacturer of a single-engine high-wing multipurpose aircraft SM-92TE PRAGA Alfa. The conceptual design of this aircraft satisfies requirements for easy operation and maintenance, including operation in difficult climatic conditions of the Arctic Circle and desert areas.



PARMA-TECHNIK, s.r.o.

www.parmatechnik.cz

In 1999 the PARMA-TECHNIK took over the program of MIKRON III aircraft engines. Thanks to continuation of personal casting, technical and technological quality assurance and by means of purchasing semi-finished products, the condition necessary for continuing in aircraft engines production have been created.

On May 17th 2000, the PARMA-TECHNIK was granted the Approval to maintain and to repair Mikron III engines, issued by the Czech CAA.

Currently the company produces newly manufactured engines applicable in UL or historic aircraft .

New modernized engine MIKRON III C UL with 60 kW(82 hp) power was launched on the market in 2007.

Engines Mikron III are now produced and modernized continuously.

In November 2017 the company moved to own new hall built in the site of Luhačovice airport.

The Approval (CZ.MF.0055) to maintain and to repair Mikron III engines gained PARMA-TECHNIK on December 12th 2017.



PBS VELKÁ BÍTEŠ, a.s.

www.pbsvb.cz

The aerospace programme is one of the pillars of PBS Velká Bíteš. We have been designing and manufacturing aircraft equipment and devices for over 45 years. Thanks to the experience obtained, the development team, in collaboration with the production personnel, is able to address customers requirements in the modifications of both existing and new products.

Products:

- jet Engines for experimental aircrafts, powered gliders, UAVs and UCAVs,
- turboprop and turboshaft engines for experimental aircrafts, ultralights, UAVs and UCAVs,
- auxiliary power units for jet trainers, helicopters.



PHOENIX AIR, s.r.o.

www.phoenixair.cz

Established in 2008.

Phoenix Air is a young company with experienced workers, designers and pilots.

Our main target is development, production and servicing of composite airplanes.

We manufacture the ultralight motorglider U-15 Phoenix in versions with different engines including electric.

Serial production started in 2010.



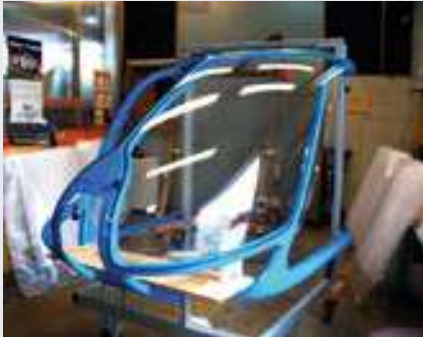
PLEXIWEISS, s.r.o.

www.plexiweiss.de

Manufacturer of various glazing in the highest qua. For more than 60 years we have been processing first class raw material.

Our manufacturing processes are certified according DIN EN 9100 : 2003 (AS 9100 and JISQ 9100).

- Best quality (no distortion, no inclusions),
- precise fitting,
- various tints,
- UV protection,
- competent consulting for new projects,
- many years of experience in all segments - helicopters, jets, ultralights, LSA, gliders, motor gliders, sports aircraft.



QUITTNER & SCHIMEK

www.qscomp.cz

Quittner & Schimek - Interconnections Solutions is an experienced distributor of premium electronical components such as connectors, backshells, wires and cables, heatshrinkable parts, relays, switches, displays, embedded PCs, converters and full range of related tools.

Quittner & Schimek is an experienced supplier of interconnection solutions for the aerospace, defense, transport and telecommunication markets. The company offers complete in-house assembly of wire harnesses, custom cables, boxes and other electrical units.

Main products:

- components,
- connectors assembly,
- wire harnesses,
- electromechanical assemblies.



RUDOLF STARÝ - R4

www.r4.cz

The company is active in the aircraft and aircraft parts design, including the aircraft of the UL and LSA category according to the customer's requirements.



ROKO AIRPLANES, s.r.o.

www.rokoairplanes.com

Rokospol Airplanes is a branch of Rokospol a.s. and is focused on the design, production and maintenance of ultra-light and light sports aircraft NG4 under the commercial name VIA.

Scope of production: Aircraft NG4 UL (Ultra-Light) according to the Czech LAA type certificate ULL 02/ 2009. Other products are aircraft in the NG4 LSA category for foreign customers. Building kits of UL, ELSA and LSA aircraft in various stages of finalization according customer requirements are also available.



RAY SERVICE, a.s.

www.rayservice.com

Ray Service, a.s. is an innovative manufacturing and trading company providing outstanding solutions in cable harnesses, electromechanical assemblies, electronic equipment and cable components for a wide range of aviation and defence customers. More than twenty years of experience and intensive development have resulted in a strong, modern enterprise, a reliable partner on an international level. Ray Service has been cooperating in the development and manufacturing of products for Airbus and Boeing aircraft systems.



ROTEX ELECTRIC

www.rotalexelectric.eu

The company Rotex Electric is a professional industrial producer of high-end BLDC (PMSM) electric drives for aviation industry. We are producing and developing BLDC motors since 2003.

Our engines have power ranging from 1kW up to 80 kW. Their application is in aeroplanes, gliders, paraglides, multicopters etc. Our motors are remarkable for their high permanent power, low weight, top quality and high efficiency.

We have great experiences with design, functionality and installations in various systems.

We provide entire range of best quality motors for cars, planes, paraglides and experimental project of all sizes.

Our company is also manufacturer of custom motors, BLDC motors as BRAKE and accessories.



SHARK.AERO CZ

www.shark.aero

Czechoslovak manufacturer of full composite airplane SHARK, with over 25 years' experience in composite manufacturing from gliders to twin-engine airplanes.

Since 2013 SHARK.AERO CZ holds the TC/PC for the SHARK UL designed by Czecho-Slovak team as high-performance UL aircraft with retractable landing gears. VTC certified by Civil Aviation Administration of China.

SHARK airplane offers unbeatable passion for flying in carbon fiber composite high performing low-wing tandem seater, with typical nature-formed silhouette, shark-shaped fin, and gills, integrated ballistic parachute, designed with adjustable seats and pedals to provide comfort to pilots from 160 up to 205 cm tall, even for hours in air. Latest avionics, speed up to 300 km/h, easy handling on all speeds, good operating costs, robust landing gears, short take-off capability. Designed for fast cross-country flights, tourism and for high performance, complex aircraft training.



SERENUM, a.s.

www.serenum.cz

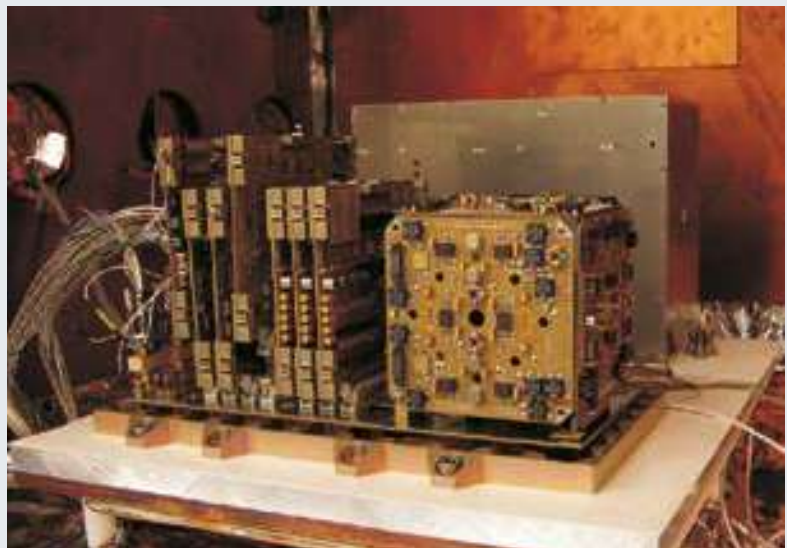
Locking devices and housing design for space application: HDRM, Cases, MGSE and EGSE design (FEA, Thermal) and development.

Measurement and control design: Localization systems; analysis and implementation of controllers and estimators; digital signal processing.

Time and Clock Management: Precision time metrology, measurement, generation and distribution of precise time.

Custom design and development of electronics: Digital signal processing, data acquisition, FPGA design, IP core development.

Custom design and development of mechanical parts: stiffness assessment, strength, modal, thermal and durability characteristics, Supporting static, dynamic, thermal calculations.



SKY PARAGLIDERS, a.s.

www.sky-cz.com

In 1988, the company SKY SERVIS was established in Slovenia. Later on, it merged with its long-time partners in the Czech Republic. Together they formed a company called SKY PARAGLIDERS. The manufacturing capacity of the company was expanded in the Czech Republic and nowadays the company manufactures a wide range of paragliders, reserves, and other paragliding accessories.

Since Sky's beginnings, we've produced dozens of different gliders; starting with nine cell gliders back in the late 80's through to present day gliders with highly complex internal rib structure and load spreading technology. Our modern gliders can be found wherever people fly: training slopes, flying XC, giving tandem rides from the slopes of ski resorts, and in World Cup competitions.



SPACEK, Ltd.

www.sdplanes.com

The SPACEK Ltd. company manufactures the SD-1 and SD-2 mixed construction light planes in the form of kits as well as RTF planes. The present key product SD-1 is the best-selling single seat ultralight aircraft on the demanding German market. The company developed its own SE line of small four stroke engines from 24 up to 33 HP. With its high performance and valuable payload, the just released SD-2 two seater has a lot of potential to follow SD-1 in sales. The SD planes are being built and fly worldwide to full satisfaction of their users.



STARTECH spol. s r.o.

www.startech-ricany.cz

Company STARTECH focuses on the precise machining of a comprehensive range of regular and special materials utilizing progressive CNC technologies, while using cutting edge equipment in the industry – mainly 5-axis and multifunctional machines.

We specialize in medium batch, small batch and single-piece production of complex and precise parts. Also we provide mounting of assemblies in a clean environment, balancing of rotary parts, cutting of materials and specialized locksmith works.

We possess a quality management system certificates as per the international standards ISO 9001:2008 and EN AS9100 rev.C for the production in aerospace industry.

Our satisfied customers include companies from the Czech Republic, EU (France, Austria, Denmark, Germany, Slovakia, Great Britain etc.) and the USA.

Our customers are mainly producers from the aerospace industry (aerospace engines, fuel pumps and regulatory pumps, auxiliary power units, brake systems, structural components of aircrafts and space probes, interior parts of civil and military aircrafts), producers of scientific devices (electron microscopes, nanolevel spectrometers, laser interferometers, optotronics) and devices for automatization and robotics applications (servomotors, automatic production lines).

Company STARTECH is a regular member of the Confederation of the Czech Aviation Industry (CCAI).



Š+Š PŘESNÉ AUTOPOTAHY, s.r.o

www.airplanecockpitdesign.com

Additional equipment airplane cockpit

These are elements of upholstery, including the dashboard, which are easy assembly and disassembly. These elements do not interfere in the cockpit and aircraft construction, to maintain the functionality and safety of the crew.

The materials are certified and they can be combined according to the manufacturer's offer. Are engaged in production since 2007 and detailed processing is among the best in this field.

We offer individual solutions to design the cockpit for the aircraft manufacturer.



ŠPAČEK PRODUCT

www.goldfren.cz

ŠPAČEK PRODUCT is the largest manufacturer of brake pads on the metal-ceramic basis in Europe. These brake pads are (in the aviation field) dedicated to the UL, LA and GA aircrafts. ŠPAČEK - PRODUCT has produced its products under trademark GOLDFREN since 1990 and sells them worldwide.

To the main fields that GOLDFREN products are dedicated to are following: bicycles, motorcycles, cars, industrial machines, aircrafts – UL, LA a GA.

ŠPAČEK - PRODUCT has recently focused on design and production of the brake components of distinction for the aviation industry. We offer main undercarriage wheels with brake, nose wheels, to which there

are also plenty of various accessories and spare parts available. Further, ŠPAČEK - PRODUCT also manufactures brake calipers, master cylinders, brake valves, brake discs and last but not least brake pads. As the only brake pads and segments manufacturer, ŠPAČEK - PRODUCT is able to carry out optimization during development as well as during the manufacturing process. The main advantage of these sinter brake pads is their braking efficiency that progressively rises with the braking intensity.

Brake components that we launch offers to our clients an effective solution to more than one problem connected with brakes.



T-CZ, a.s.

www.tcz.cz

Currently, the company has primarily been orienting and further developing its activities in the branches of RADIOCOMMUNICATION and RADIOLOCATION technology. In the branches mentioned above, T-CZ offers comprehensive services to its customers that are of high professional standard.

RADIOLOCATION branch covers delivery of surveillance and approach radar systems on turkey bases, modernization of airport radars and other related activities like wave guides or antennas production.

RADIOCOMMUNICATION branch includes especially development and production of base and vehicle radiostations and their integration into radio systems. Important part of this branch forms also wide range of vehicle, base and special antennas.

ENGINEERING PRODUCTION forms complement production branch used for production of T-CZ's radiocommunication and radiolocation products and for custom manufacturing as per customer's demand up to surface finishing of the parts.



TECHNOMETRA ČESKÝ BROD, a.s.

www.technometra.eu

Manufacturing of gearboxes for transportation vehicles:

- A100, A80 and A80RR Final drive housing/differential for Panhard armored vehicles,
- 2P250 gearbox for Daewoo-avia trucks (4x4 versions),
- rally conversion kit for the Mitsubishi Lancer EVO IX gearbox.

Precision parts manufacturing, by contract mostly for the following customers:

- Aircraft Industries, a.s.,
- Letov Letecká Výroba s.r.o.,
- Aero Vodochody a.s.,
- Motorpal, a.s.,
- subsidiary of Nimda Co. Ltd.,
- Ammann Czech Republic, a.s.,
- and other prominent customers.

Further production program includes:

- axial piston pumps and hydraulic motors with volumes from 12,5 to 125 ccm and working pressure up to 35 MPa,
- filters (medium- and high-pressure),
- filter components for particles sizes 3 - 630 µm,
- hydraulic and pneumatic systems and instruments,
- aircraft hydraulic and pneumatic instruments for the L-29, L-39, L-410, L-159, Ae 270 and M 101T aircraft,
- propeller governors.



TECHPROAVIATION, s.r.o.

www.techproaviation.com

TechProAviation, s. r. o. is a limited liability company based in Olomouc city. Company was established in 2010. Since then the company has grown in size (30 employees) and capabilities. We have designed single seat UL airplane, the Merlin 100. Currently, we are producing parts for several established sport aircraft companies, such as Bristell, Skylader and Evektor. Also we are cooperating with Italian and British companies.

Cooperation possibilities:

- airplane design, aerodynamic and strength calculations, loading calculations,
- 3D/2D modelling and drawing,
- turning, cutting (milling, laser cutting),
- bending, pressing, hammering,
- welding, riveting,
- heat treatment, surface finish,
- assembly and installations,
- composite parts,
- strength tests,
- airplane certification (UL, LSA).

References:

- Bristell,
- Crystalis,
- Direct Fly,
- Dova,
- Evektor,
- Flying Legend,
- Rokospol aviation,
- Skylader,
- Sprite Aviation Services,
- Zlin Aviation.



TL ELEKTRONIC CZECH

www.tl-elektronic.com

TL Elektronik was founded in 1995 and has developed more than 47 instruments determined entirely for aircraft.

Our products are glass cockpit solution EFIS and EMS Integra with 3D terrain, autopilot, Rotax EMS for Rotax 912iS engine, Rotax Flydat instrument and family of 57mm instruments like accelerometers, fuel computers, flight position loggers etc. for experimental and ultralight aircraft.

We are supplier to companies such as BRP-Rotax, Honyewell, BAE systems, Extra Aircraft, Evektor, Czech Air Force, Atec and others.

Integra glass cockpit solution:

Glass cockpit EFIS & EMS Integra TL-6624 is a multifunctional system that integrates all primary flight and engine instruments. Integra also includes navigation systems and worldwide 3-D terrain maps with optional autopilot. Separate EMS TL-6724 or EFIS TL-6524 systems also available, all types comes with 7 or 9 inch display. ROTAX EMS TL-7124 is produced under Rotax licence for engine Rotax 912iS and exclusively distributed via Rotax engine distribution network. New twin engine display feature available.



TL-ULTRALIGHT, s.r.o.,

www.tl-ultralight.cz

Established in 1989 in Hradec Králové, TL-ULTRALIGHT has produced more than 1000 ultralight aircraft.

The TL-ULTRALIGHT factory uses the most sophisticated machines such as CNC lathes, CNC milling cutters, water jet cutting and 9 meter (30feet) long 5-axis milling cutter. This equipment allows TL-Ultralight to keep up with the latest technology and to offer the best quality products.

You are welcome to visit us for a factory tour and a demonstration flight.



TOMARK AERO CZ, s.r.o.

www.tomarkaero.com

For a number of years, TomarkAero has been one of the leading companies in sports Aviation. Since 2014, TomarkAero has been successfully expanding its product portfolio and has recently widened its comprehensive range of aircraft:

Skyper GT9 – a classic UL and LSA all-metal high-wing aircraft, with a comfortable side-by-side cockpit, ideal for travelling, training, cross-country, and flying for fun. It offers high performance and comfort, great lifetime, low cost, a roomy baggage compartment with advantageous access from the outside of the aircraft, and excellent outlooks for unique visual experiences and for making photos and videos. Designed according to Czech UL2-1 and ELSA, German LTF-UL and US LSA requirements for 600 kg MTOW.

Skyper GT9 is a joint project and a combination of experience and production capacity of TomarkAero and a team of development experts from a number of projects previously implemented in the sports aviation. This year's TOP offer has been made through a combination of knowledge and experience. With its looks, performance, and flight characteristics, this all-metal high-wing aircraft stands out in the competitive aviation environment.



TRANSCON ELECTRONIC SYSTEMS, s.r.o.

www.transcon.cz

The company TRANSCON ELECTRONIC SYSTEMS is a private independent company, established in 1990. The company has its own development of hardware and software, prototype workshops, production workshops, servicing department and transport. Development, manufacturing and servicing of equipment is certified in accordance with the quality control system ČSN EN ISO 9001:2009. The company TRANSCON is specialized on electronic and electrical equipment for airports & heliports.

Products & Services:

- integrated airport control and monitoring system AMS,
- systems of airport lights and airport signs,
- system of multiple transfer of data and commands DAP 128 TC,
- constant current regulators for power supply of lights,
- complete execution of airports and heliports with use of container program,
- assembly and chief assembly,
- guarantee and afterguarantee servicing.



TOMÁŠ PODEŠVA

www.podesva-air.com

The company activities consist of production of custom-designed airplanes, replicas, as well as aircraft made to the specifications provided by clients. We specialize mainly the „classical“ style aircraft – made of standard materials (metal and wood); the starting structural element of our aircraft is the steel tube truss or the all-metal semi-monocoque structure. Thanks to our in-house design capability we are able to fulfill various, often unconventional, clients' requests (providing the design solution for mono-, bi- or triplanes; high-, mid- or low-wing, side-by-side or tandem seating arrangement, etc.).

Besides the manufacturing activities we provide also the servicing – we carry out inspections and checks, repairs and overhauls of light aircraft and we offer all other aviation services, e.g. supply of spare parts, modifications and rebuilding of aircraft etc.



UNIS, a.s.

www.unis.cz, www.uni-daac.cz, www.unis-testlab.cz

Division of Aerospace and Advanced Control (DAAC) is a part of UNIS company with separate organization structure to fully support the specific business, development, testing and production processes in accordance with the aviation standards. DAAC is focused on development and production of engine control and monitoring systems (FADEC/ ECU/EMM), hydraulic actuator control units and power electronics for aerospace and automotive industries.

- Research and development
- Analysis, HW & SW design, testing
- Certification (RTCA/DO-254, DO-178B/C, DO-160G)
- Prototype and serial production
- Power Electronics
- Critical Control Systems
- Micro-turbine Control
- Embedded Systems



VERNER MOTOR

www.vernermotor.com

Verner Motor has been in the aviation engine manufacturing business since 1991. Since 2012 the company specializes in design and manufacturing of its own line of radial engines for Ultralight, Experimental and replicas of historic aircraft. Currently the company offers 5 types of radial engines with power from 42 up to 158 HP: Scarlett 3V (42 HP), Scarlett 5V (60 HP), Scarlett 5Si (83 HP), Scarlett 7U (124 HP) and Scarlett 9Si (158 HP).



WALKERJET

www.walkerjet.cz

The WALKERJET company was established in 1998 and was the only company in the Czech Republic to focus on paramotor manufacturing. Our success is based on the many years of experience of Viktor Prochazka, the company founder, which he gained in the field of flying and construction of sport aviation apparatuses dating as far back as the late 1980's.

All our products are the result of a co-operation between the main design engineer, the company test pilots and other professionals such as WALKERJET dealers across the globe. We constantly develop new ideas, add new features and search for the best materials while maintaining a focus on reliability and performance. This approach results in the highest quality and the best design of WALKERJET products.

We began to mount our own engines on WALKERJET paramotors since 2005. These engines are produced by us under the name Fly engine. The process of the development and innovation culminated in a model range of engines 2010 that matches the most pretentious requirements for quality and reliability. Thanks to it these engines belong to the best products in the field of powered paragliding in the world. All parts are produced in our factory which enable us to ensure the affordable stable prices even with a full equipment and a maximum quality, the cheap spare parts and service.



WOLFSBERG AIRCRAFT, s.r.o.

www.wolfsbergaircraft.com

Wolfsberg Aircraft s.r.o. was established in Prague in 1998. Successful production continues the long tradition of quality products of the Letov company, set up by the Czech Government in 1918 expressly to produce its warplanes. It turned its attention to Ultralight aircraft in 2008. Sparrow ML is all composite ULL plane, in

configuration with twin tailbooms and pusher layout. With stylish exterior, tandem seating reduces air drag giving greater speed on modest power, the occupants more elbow room and superb view. Sparrow has large car type doors for better entry.



WOODCOMP, s.r.o.

www.woodcomp.cz

WOODCOMP came into existence at the end of 2000 as a result of merger of the two largest manufacturers of aircraft propellers in Czech Republic having a rich and long tradition. The result of this merger is a high-tech company, with production capacity of more than 2000 propellers annually and with a top daily production rate of 38 units. The company employs 30 qualified workers. Customers can visit the development and testing facility at the company premises and also the special shops for processing and testing of wood, composite materials and metals. In the production program there are tens of types and more than 150 versions of aircraft propellers of fixed geometry, ground adjustable and variable pitch. The propellers are produced almost for all types of engines and aircraft in the UL, LSA, Experimental and also in PPG category. We offer here the all-wood propellers, all-composite and also the wood-composite propellers. The propellers are marketed and exported into 40 countries worldwide. Our propellers are designed for piston engines up to 220 kW/ 300 HP. Sales and maintenance/repair centres are in 40 countries. Quality system: MOA, DOA, POA.



ZALL JIHLAVAN AIRPLANES, s.r.o.

www.skyleader.aero

We specialize in design, manufacturing, sales and maintenance of all-metal and carbon-composite light aircraft (UL/LSA category) for recreational flying, pilot training and special operations. Our aircraft provides safety, prestige and emotion to our worldwide customers. We are also a certified component supplier for aeronautical industry.

Characteristics:

- high level of flight safety,
- smooth and easy handling,

- wide range of flight speed,
- very short take-off and landing distances,
- high level of customization,
- full factory customer service,
- ASTM certified materials and production,
- long-term durability,
- fast assembly and disassembly wings,
- low maintenance cost.

Manufacturing skills:

drilling, milling, routing, forming, slotting, riveting, sealing, chromating.



ZALL LETOV SIMULÁTORÝ, s.r.o.

www.letovsim.cz

ZALL LETOV Simulátorý s.r.o. combines more than 60 years of experience in R&D and production of simulator training systems. Over 500 simulators and other flight training devices were produced and delivered to more than 30 different countries.

Zall LETOV Simulátorý s.r.o. has a strategic partnership with ZALL Aviation, based in Wuhan, China, which further strengthens our capabilities and position in the market, especially in the Chinese market.

Our product portfolio includes all types of flight simulators ranged from BITD, FTD, FNTP II MCC up to FFS fully certified by EASA.



ZLIN AIRCRAFT, a. s.

www.zlinaircraft.eu

The Czech company ZLIN AIRCRAFT successfully continues the tradition of the production of the legendary ZLIN aircrafts by manufacturing:

- two-seat aerobatic Z 242L aircraft - designed for basic and continuing training in civil and military aviation schools;
- two/four seat model Z 143 LSi aircraft - primarily a training and touring airplane, suitable for patrolling over land and nautical targets, towing gliders and banners.

The product portfolio also includes wheels, brakes, ejector seats, parachute components as well as other components.

Its own private corporate airport, located on the plant's premises provides comprehensive training programs for pilots and maintenance personnel. It is also home to all its product repairs, maintenance and services.

ZLIN AIRCRAFT, a. s. holds all the necessary quality certificates; ISO 9001, EASA, FAA and more, including the certificates necessary for military production.



ZLIN AVIATION, s.r.o.

www.zlinaero.com

Since 1999 the construction of the Savage planes (which employ the best aeronautical materials coming from USA, Italy and France) started in Czech Republic and it is carried by the aeronautical company ZLIN AVIATION s.r.o.

All workers are fully qualified and have gained extensive experience in the Country's most important aeronautical companies (Moravan, Let, etc.). The production line features a whole series of product quality controls and construction checks.

Inspired by one of the aviation legends of 20th century, -the Piper Cub- the Savage is sold in more than 30 different Countries. With the last evolution, the new "Shock Cub" with his new fuselage and shock absorbers, his new special Hyper Stol wing design and extra safety characteristics due to the almost stall and spin free attitude and very low stall speed, Zlin Aviation is now able to offer an unique design, to all those pilots that dream to be able to land in the "garden" just behind their houses.



ZLIN-AVION SERVICE, Ltd.

www.zlin-avion.cz

ZLIN-AVION service is engaged in aircraft maintenance since 1992. We perform periodic inspections, repairs, general overhauls and restorations of Zlin, Cessna, Cirrus and vintage planes including comprehensive services in the sphere of airworthiness (CAMO) and we also arrange aircraft sales and import.

Aircraft serviced by us are flying in many countries around Europe and overseas.



12 LIST OF PRODUCTS AND COMPANIES



UL/LSA AIRCRAFT

A2 CZ	Ellipse Spirit
Aeropilot	Legend
Aerospool CZ	ULL Classic
AirLony	Skylane UL
AirLony	Highlander
Atec	Atec 321 Faeta
ATEC	ATEC 321 Faeta NG
ATEC	Atec 122 Zephyr
ATEC	Atec 212 Solo
ATEC	ATEC Omsider
BRM Aero	Bristell Classic
BRM Aero	Bristell RG
BRM Aero	Bristell TDO
CARBON DESIGN	FM250 Vampire
Czech Sport Aircraft	PS-28 Cruiser
Direct Fly	Alto 912TG
Distar	UFM-13 Lambada
Distar	Samba XXL
Dova Aircraft	DV-1 Skylark
Evektor-Aerotechnik	EuroStar SL+
Evektor-Aerotechnik	SportStar RTC
Evektor-Aerotechnik	Harmony LSA
Gramex	Song LW/ e-Song
Ivanov Aircraft	ZJ-Viera
Jaroslav Sedláček UL-jih	Colibri
Jaroslav Sedláček UL-jih	Sunwheel UL
Jaroslav Sedláček UL-jih	F100 Fascination
Jaroslav Sedláček UL-jih	E100 Evolution
JMB Aircraft	VL3 Evolution
Kubíček Aircraft	M-2 Scout
Phoenix Air	U-15 Phoenix
ProFe	Banjo MH
ProFe	Duo Banjo
Roko Airplanes	NG4 VIA
Roko Airplanes	NG6
Shark.Aero CZ	Shark
Spacek	SD-1 Minisport
Spacek	SD-2 SportMaster
TECHPRO AVIATION	Merlin 100 UL
TL-Ultralight	TL-2000 Sting S4
TL-Ultralight	TL-3000 Sirius
TL-Ultralight	TL-2000 Sting RG
TL-Ultralight	TL Stream
Tomark Aero CZ	Viper SD-4
Tomark Aero CZ	Skyper GT9
Tomáš Podešva	Tulák Dandy
Tomáš Podešva	Trener UL
Wolfsberg Aircraft	Sparrow ML
Zlin Aviation	Savage
Zall Jihlavan Airplanes	Skyleader 600
Zall Jihlavan Airplanes	Skyleader 200/500
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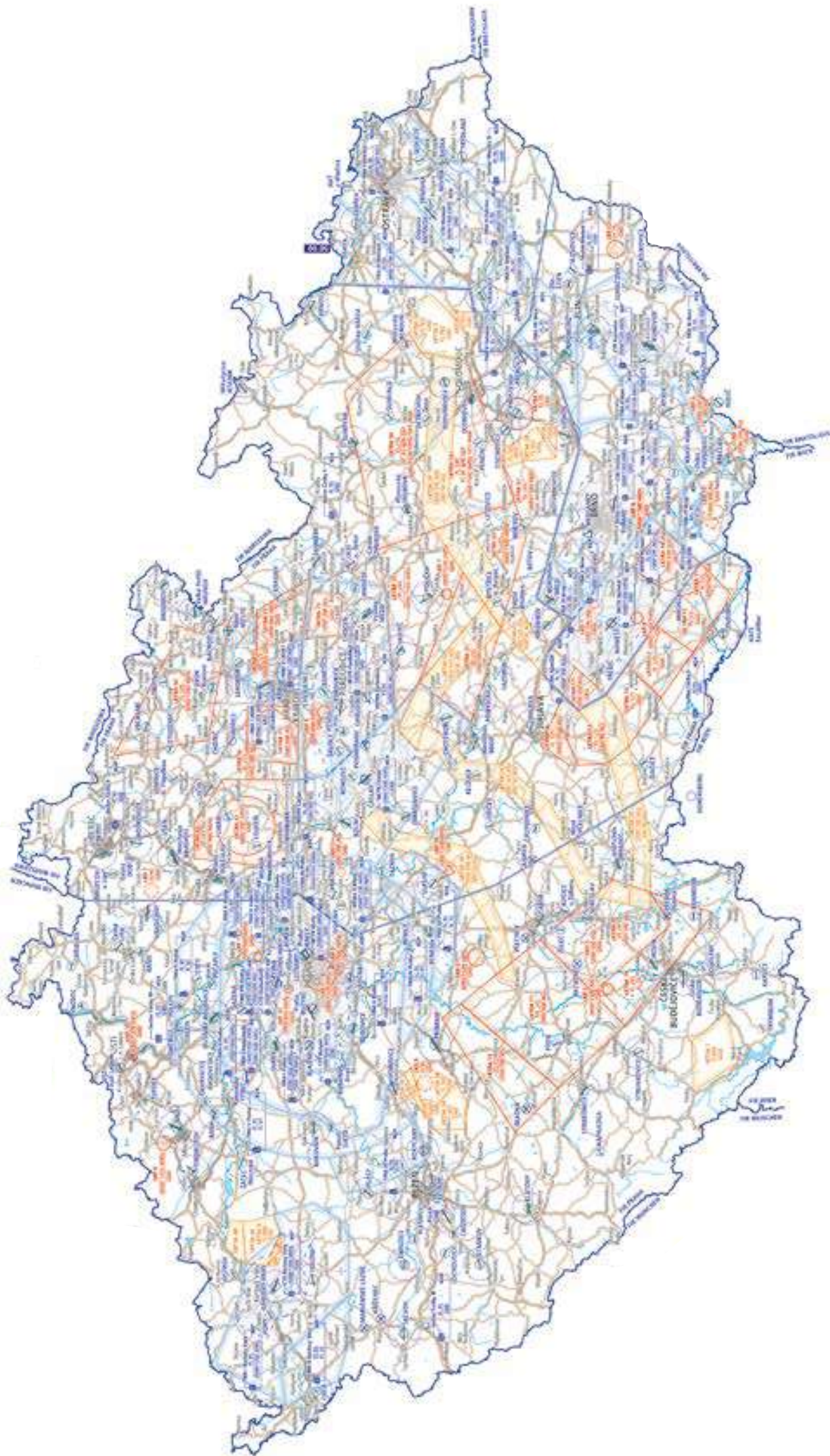
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AIRSPACE OF THE CZECH REPUBLIC

LAA ČR Aviation Chart



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