

**Benvenutas Ivanauskas**  
**FAI Phoenix diploma nomination 2024**  
**For recreation of replicas of Oškinis' Technikas T-1/BrO-1 and Oškinis BrO-9 sailplanes**  
**and restoration of multiple other historical sailplanes**

**Benvenutas Ivanauskas, an independent old aircraft enthusiast, during 2010's and 2020's has restored over a dozen of vintage glider aircraft or built their replicas. The most notable reconstructions are the replicas of Lithuanian-designed trainer gliders Technikas T-1 (BrO-1) (1932) and Bro-9 "Žiogas" (1952).**

Mr. Ivanauskas is engaged into aircraft restoration activities since mid-2000's, when he was working as a technician at the Lithuanian Museum of Aviation. There he was in charge in restoring Museum's exhibits. Having quit his work at the Museum, Mr. Ivanauskas continued as independent aircraft technician, with the hobby of vintage aircraft restoration. Partial list of his restored aircraft is provided in the annex to this document.

Benvenutas is a nurturer of aviation history in Lithuania and intends to rebuild as many Lithuanian gliders as possible to honour the memory of gliding pioneer Bronius Oškinis and others.

Benvenutas himself considers the recreation of two sailplane aircraft - Technikas T-1 (BrO-1) and Bro-9 "Žiogas" (*Grasshopper* in Lithuanian) to be the most interesting and most valuable projects of his career. Both aircraft originally were created by Lithuanian designer Bronius Oškinis, respectively in early 1930's and in early 1950's, both of them represent the key moments in Lithuanian gliders' construction and sailplanes' sports. Both aircraft made significant contribution to Lithuanian gliding, for a period of time being the most popular gliders of their time. Further to that the BrO-9 for some period in 1950's was among the most produced sailplane types in the world, motivating the new generation of Lithuanian sailplane pilots and designers to engage into aviation.

No single T-1/BrO-1 or BrO-9 has survived beyond 1960's. Further to that, no complete set of drawings of each aircraft have survived either. Therefore, the restoration of each of those aircraft also included the development of respective drawings, a task which made their restoration even more challenging.

## **SUPPORTING INFORMATION**

### **1. Oškinis BrO-9 "Žiogas" (1952)**

The advanced trainer sailplane BrO-9 was designed by Bronius Oškinis in 1952. After having been assessed being better than anything of its class available in Soviet Union at that time, its serial production was commenced in August 1954. By the end of the year BrO-9 serial production proceeded at a rapid pace with roughly 4 gliders coming off the production line every 6 working days.

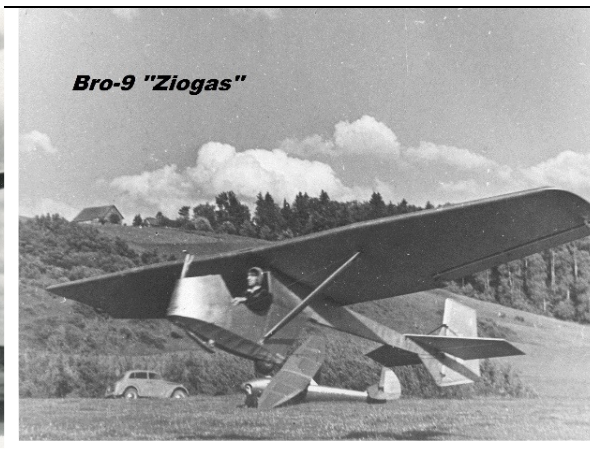


*Bro – 9 in Simferopol, Ukraine 1955*



*Mass production of Bro – 9 in Simferopol*

Until the end of BrO-9 serial production in 1955 a total of 320 BrO-9's were manufactured at the Simferopol workshops (Ukraine). The glider's wooden frame, however, turned out to have a very short time span, and by 1958 all BrO-9s were destroyed or scrapped.



*Bro- 9 "Žiogas" flights in Kulautuva, Lithuania, 1950's*

The era of BrO-9's In Lithuania lasted at least 8 years. Oškinis himself tested the BrO-9 in thermals and reached the altitude of 600 m. In the summer of 1957 multiple BrO-9s soaring flights were carried out above cumulus clouds. Later the same year BrO-9 were tested at simple acrobatic manoeuvres, including spinning, wing-overs and loops (often after launched from a winch, after reaching an altitude of just 200-300 m!).

The complete set of BrO-9 drawings went to Simferopol Gliders' Plant in 1950's and only incomplete set remained in Oškinis' archives. By 2010 the original drawings appeared to be lost; any attempts to recover them from Simferopol were further hindered by Russian aggression and illegal annexation of Crimea back in 2014. Therefore, Benvenutas had to build BrO-9 from scratch, what took over a decade. B. Ivanauskas has restored the drawings, has conducted several additional calculations and material research to fill in the gaps. All the wooden and metal parts

were built by B. Ivanauskas himself. The fabric was used as close as possible to the original one. The glider was painted in original green.

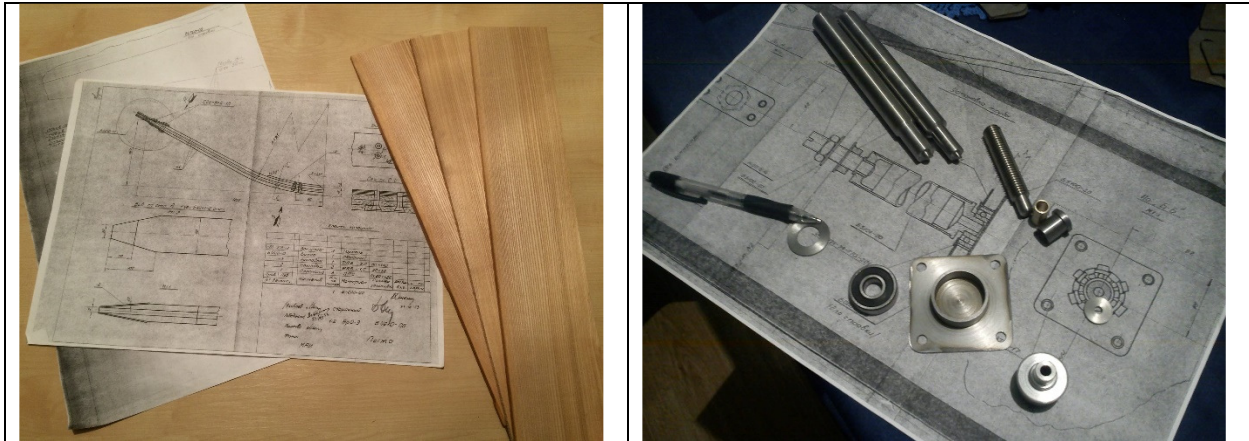


*Bro-9 Žiogas in 2020, after its first test flight*

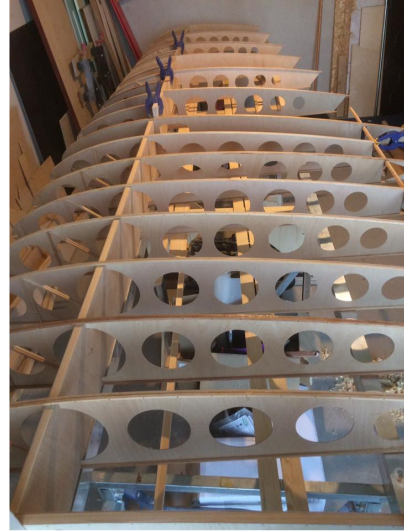


*Bro-9 taking off*

The replica of Bro-9 “Žiogas” was the first replica of Lithuanian vintage glider, rebuilt in Lithuania. This project has a major historical and symbolical significance as a link between older, new and incoming generations of aircraft designers, pilots and aviation enthusiasts.



*Incomplete set of drawings*



*BrO- 9" Žiogas" in the process of restoration at Ivanauskas' backyard*

## 2. Oškinis' Technikas T-1/BrO-1 (1932)

The next major project, undertaken by B. Ivanauskas, was the replica of first mass produced Lithuanian glider – Technikas T-1 (BrO-1) of Bronius Oškinis.

Although the history of soaring in Lithuania traces back to 1911, the devastation of World War I has effectively voided the first achievements. The beginning of national sport and recreational aviation most reliably can be linked to the establishment of Aeroclub of Lithuania in 1928 and its efforts to promote civil flying. Pursuing this goal, Aeroclub of Lithuania in 1931 purchased three sets of drawings of German primary trainer RRG 23 „Zögling“. This simple and easy-to-make construction was intended to be copied and made using local resources and capacities. One set of drawings was given to the newly established gliding section of Kaunas Superior Technology College. The person in charge of construction was Bronius Oškinis, then a 19-year-old 4<sup>th</sup> grade student. Oškinis made several improvements to the original drawings, installed struts, made rounded wing tips and bigger tail, thus increasing its lift to drag ratio and in 1932 presented his construction, titled “T-1”, or, a full name – “Technikas-1” (a tribute to his *alma mater*, which partially funded the construction process).



*Original Technikas-1 (BrO-1) in 1932, Kaunas*



*Original Technikas-1 (BrO-1) in Nida*

The construction was positively assessed by the Aeroclub of Lithuania, which ordered the production of several more. Also, some copies of “T-1”, latter titled BrO-1, under his developer, were made in Ukmergė Technical College and by other enthusiasts.

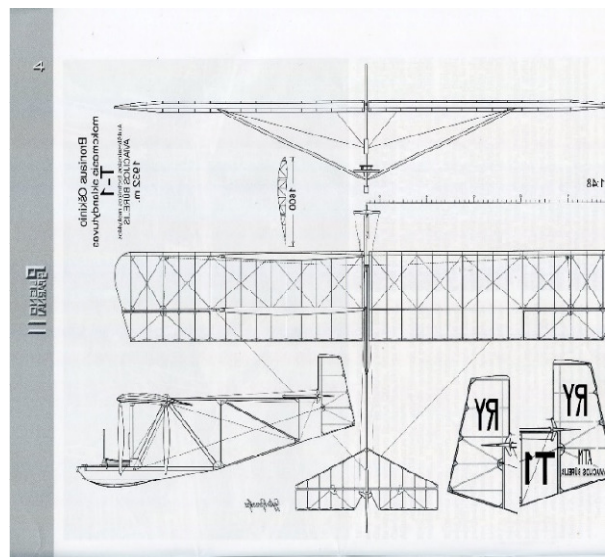
A total of up to 10 BrO-1/T-1s made the backbone of Lithuanian sailplane initial training system, they were extensively used in Kulautuva, Nida, Ukmergė, Biržai training grounds until 1940. First Lithuanian gliding records were set with this aircraft. With the Soviet occupation of Lithuania all

civil aircraft were seized by occupation authorities and despite efforts to revive gliding sports in 1942, eventually no BrO-1/T-1s survived World War 2.



*Assembly of replica Technikas-1 (BrO-1)*

Luckily, almost complete set of original drawings has been preserved. B. Ivanauskas restored the BrO-1/T-1 from scratch as well. The works took place in 2020-2022. The replica was officially presented on 04.07.2022 in Nida (Curonian Spit, Lithuania), near the location of interwar Nida Gliding School, where most of the original T-1's/BrO-1's were used in summer months of 1934-1938.



*Assembly of replica Technikas-1 (BrO-1)*



*Technikas T-1/BrO-1 after first flight, 2023*



*Technikas T-1/BrO-1 over dunes in Nida – the same place its original flew in 1930's*


### **3. Other restoration projects**

B. Ivanauskas has also done major repair works to such gliders, like Schleicher K 8, Schleicher Ka 6, Schleicher K-6E, three B Scheibe Bergfalke III, Oškinis Bro – 11M “Zylė”, JR-1 etc.


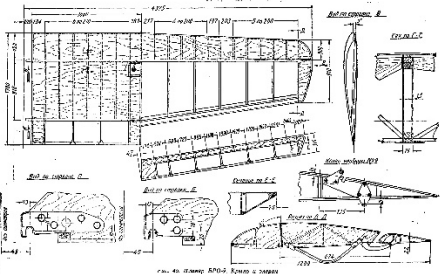

Further to the restoration of vintage aircraft Mr. Ivanauskas is an active promoter of gliding, aviation sports and aviation-based community building. He is the core organizer of community aviation events, where restored BrO-1/T-1, BrO-9 are used to promote aviation, gather community of interest, engage children into aviation.

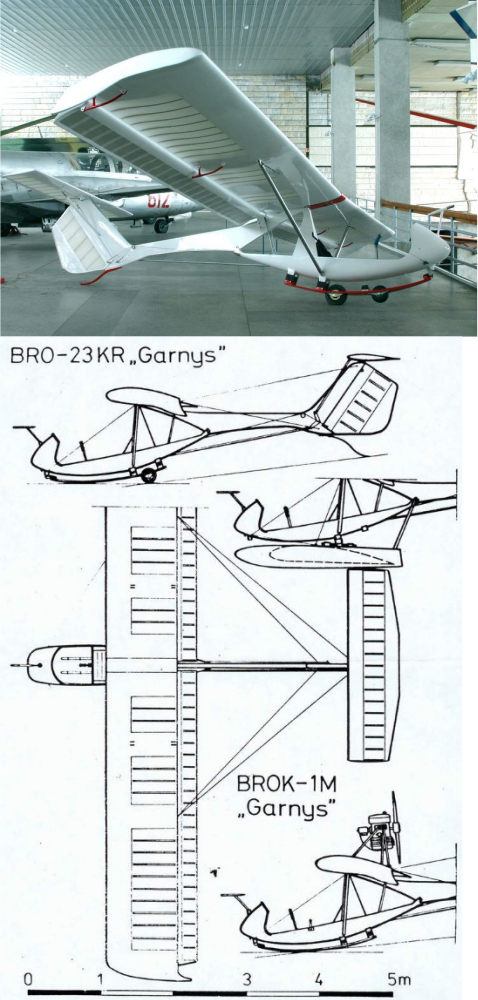
He was an organizer of the 40<sup>th</sup> Vintage Glider Rally of 2012, which took place in Prienai, Lithuania (ICAO: EYPR) and has gathered more than hundred vintage aircrafts and their pilots.



**ANNEX: The list of aircraft restored or their replicas built by B. Ivanauskas:**

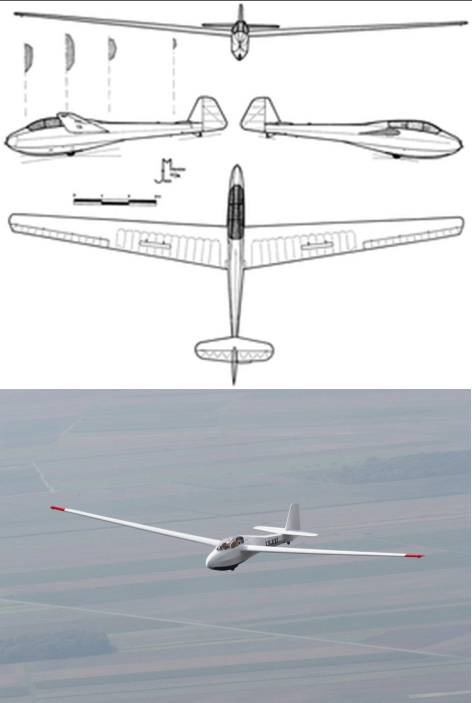

Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
<p><b>BrO-1 (Technikas T-1)</b></p> 	<p>Technikas T-1 (latter BrO-1) was built in 1932. It was the first glider of then 19 years old future aircraft designer Bronius Oškinis, which at that time was a student of Superior Technical college (hence the name of the aircraft – “Technikas-1” – (Technician).</p> <p>B. Oškinis was working on the drawings of the the German <i>Rhön-Rossitten Gesellschaft</i> 23 „Zögling“ and has slightly improved its performance achieving aspect ratio of 11. Technical drawings and material specification was prepared by Oškinis himself.</p> <p>Already in 1934 flying T-1 the first Lithuanian record of unpowered flight endurance (7 hours 1 min.) was achieved.</p> <p>A total of over 10 BrO-1’s were built in Kaunas and Ukmergė (Lithuania) prior to 1940, making the basis of inter-war Lithuanian gliding sport. Few T-1’s/BrO-1’s, having survived World War 2 were still flying in 1950’s.</p>	<p>During 2015-2022 basing on preserved drawings B. Ivanauskas built one flightworthy replica of BrO-1.</p> <p>All work, from drawings to production, was performed by B. Ivanauskas alone.</p> <p>The replica was officially presented on 04.07.2022 in Nida (Curonian Spit, Lithuania), near the location of interwar Nida Gliding School, where most of the original T-1’s/BrO-1’s were used in summer months of 1934-1938.</p> <p>The aircraft has no registration. It is owned by Nida Gliding School and is not publicly displayed, except for public events. T-1 is based in Paluknys airfield (ICAO: EYVP)</p>
<p><b>BrO-9 “Žiogas”</b></p>	<p>BrO-9 “Žiogas” (Lithuanian – <i>Grasshopper</i>) is a wooden parasol glider, developed by Lithuanian aircraft designer Bronius Oškinis in 1952.</p> <p>The glider was intended for initial training. Three initial prototypes were built – an open-fuselage and skid-equipped BrO-9(A) (first flight on 15.06.1952), BrO-9(B) with covered fuselage and wheel chasis (September 1952) and BrO-9(C)</p>	<p>B. Ivanauskas was building one replica of BrO-9 from the scratch to an airworthy condition from 2009 to 2020.</p> <p>The building process also included recovery and restoration of original drawings, which were partially lost.</p> <p>All work was performed by B. Ivanauskas alone.</p>


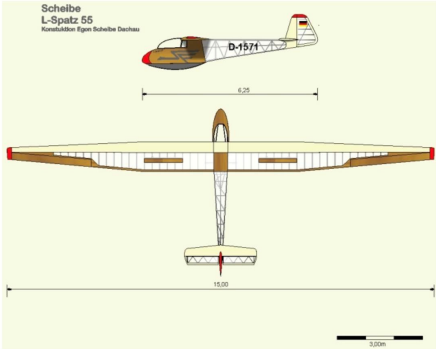





Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
  	<p>with covered fuselage, longer and more narrow wings.</p> <p>BrO-9 was produced in series at Simferopol Aircraft Plant (Ukraine) in 1953-1954. It was soon ousted by next construction of B. Oškinis – BrO-11, despite Oškinis’ attempts to prove that those gliders were complementing each other and not competing.</p>	<p>The aircraft was test flown on 15.07.2020.</p> <p>The aircraft is registered as LY-BHH, owned by B. Ivanauskas and operated by Kaunas Country Gliding sport club and is based in Pociūnai airfield (ICAO: EYPR).</p>
<p><b>BrO-23KR Garnys</b></p>	<p>The Karvelis’ BrO-23KR Garnys (Lithuanian - <i>Stork</i>) is a fibreglass primary glider, designed by Balys Karvelis and constructed by Česlovas</p>	<p>The aircraft were produced in 1982, serial No 001 and 002.</p>

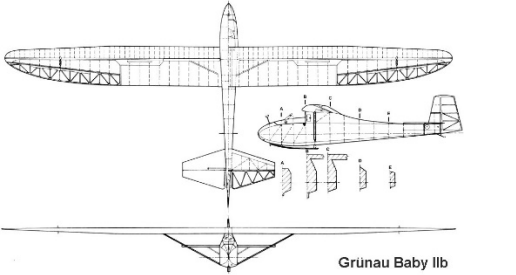
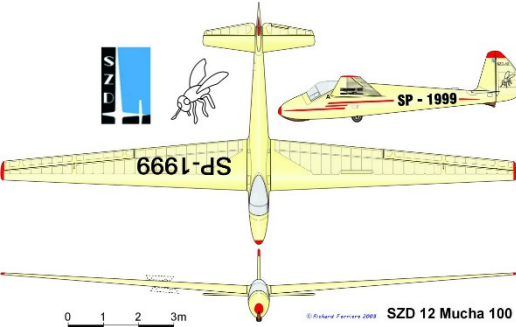
Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
 <p data-bbox="212 574 428 597">BRO-23KR „Garnys”</p> <p data-bbox="436 1003 548 1052">BROK-1M „Garnys”</p> <p data-bbox="226 1198 617 1221">0 1 3 4 5m</p>	<p data-bbox="747 233 1325 298">Kisonas and K. Rinkevičius (hence the KR of the name) in 1980.</p> <p data-bbox="747 305 1325 370">The aircraft was designed under the order of Kaunas hang gliding club (Lithuania).</p> <p data-bbox="747 376 1325 474">Only two pieces were completed. One of them latter was motorized and renamed BrO-1M “Garnys”.</p> <p data-bbox="747 480 1325 578">As of 2009 single airframe was publicly displayed in the Lithuanian Aviation Museum (Kaunas, Aleksotas Airfield, ICAO: EYKS).</p>	<p data-bbox="1348 233 1869 298">B. Ivanauskas restored both of the gliders to a flyable condition in 2009.</p> <p data-bbox="1348 305 1869 370">One of them is owned by and displayed at Lithuanian Aviation Museum (Kaunas).</p> <p data-bbox="1348 376 1869 474">Second one is a personal property of private collection. It is based in Paluknys airfield, Lithuania (ICAO: EYVP).</p> <p data-bbox="1348 480 1869 545">None of the aircraft have registration numbers.</p>
<p data-bbox="201 1240 415 1263"><b>EoN Olympia 419</b></p>	<p data-bbox="747 1240 1325 1370">EoN Olympia was a family of gliders, produced from 1947 by Elliotts of Newbury (UK). EoN Type 6 Olympia 419 was a long span (18.9 m), long fuselage (7.77 m) version.</p>	<p data-bbox="1348 1240 1869 1305">The aircraft was produced in 1958, serial No EON/4/010.</p> <p data-bbox="1348 1312 1869 1370">B. Ivanauskas restored glider to a flyable condition in 2009.</p>

Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
	<p>A total 7 Olympia 419s were made. Only 2 are flightworthy as of 2024. One of them was exported to Soviet Union and in early 1960's it ended up in Lithuania. The glider has crashed in 1963 and afterwards was stored in non-flyable condition.</p> <p>The aircraft was purchased in 2009 by Lithuanian Aviation Museum. After restoration it took part in 2009 Vintage Glider's Rally in Achmer (Germany).</p>	<p>All work was performed by B. Ivanauskas alone.</p> <p>The aircraft is registered LY-OLY, owned by Lithuanian Aviation Museum, displayed at the Lithuanian Aviation Museum (Kaunas, Aleksotas Airfield, ICAO: EYKS).</p>
<p><b>Scheibe Bergfalke III</b></p> 	<p>The Scheibe Bergfalke (German: "mountain hawk") is a German glider designed by Egon Scheibe as a post-World War II development of the Akaflieg München Mü13 produced before and during the war.</p> <p>Bergfalke III was a modification with streamlined canopy, taller fin and rudder, Schempp-Hirth airbrakes, 2° forward sweep on wings.</p> <p>A total of more than 320 were produced from 1951 to 1982</p>	<p>The particular aircraft was produced in 1967, serial No 5600.</p> <p>B. Ivanauskas restored glider to a flyable condition in 2011.</p> <p>Test flight took place on 14.04.2011.</p> <p>All work was performed by B. Ivanauskas alone.</p> <p>Currently the aircraft is registered LY-AXI, owned by Biržai Air Club, based in Biržai Airfield (ICAO: EYBI) and is extensively used for training of future sailplane pilots.</p>

Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
		
<p data-bbox="205 971 373 993"><b>Scheibe SF-27</b></p> 	<p data-bbox="751 971 1325 1138">Scheibe SF-27 Zugvogel V (English: Migratory Bird) is a single-seat Standard Class sailplane, designed and built in Germany in the 1960s. SF-27A is a standard class sailplane modification of this model.</p>	<p data-bbox="1350 971 1871 1284">The particular aircraft was produced in 1967, serial No 6081. B. Ivanauskas restored glider to a airworthy condition in 2024. It took almost 2 years to complete this project. The aircraft is registered LY-BLR, owned by B. Ivanauskas, based in Pociunai airfield, Lithuania (ICAO: EYPR) and is used for advanced trainings.</p>

Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
<p data-bbox="201 232 520 261"><b>Scheibe Spatz / L-Spatz 55</b></p>  	<p data-bbox="747 232 1325 407">Scheibe Spatz is a German glider with a mixed metal and wood construction, built from 1952 until 1962. Later versions were known as the L-Spatz, the letter L standing for <i>Leistung</i> (German for "performance").</p> <p data-bbox="747 410 1325 513">The modification L-Spatz 55 is a high performance certified version (1954) with a 15.00 metre wingspan, 6.25 m length.</p>	<p data-bbox="1346 232 1869 297">The particular aircraft was produced in 1959, serial No 12.</p> <p data-bbox="1346 300 1869 513">B. Ivanauskas restored glider to a flyable condition twice. The first restoration took place in 2007; then it was registered LY-GNK. With the change of the owner, the aircraft was fixed in 2023, already under the new registration No. LY-GUN.</p> <p data-bbox="1346 516 1869 654">Currently the aircraft is registered LY-GUN. It is a part of private collection, also used for flights. The aircraft is based in Paluknys airfield, Lithuania (ICAO: EYVP)</p>
<p data-bbox="201 925 695 954"><b>Schneider DFS 108-14 SG-38 Schulgleiter</b></p> 	<p data-bbox="747 925 1318 1206">Schneider DFS 108-14 SG-38 Schulgleiter is a German high-wing, cable-braced, single-seat primary glider that was designed by Schneider, Rehberg and Hofmann at Edmund Schneider's factory at Grunau in 1938, hence the designation. It was produced by several builders, including Deutsche Forschungsanstalt für Segelflug (DFS).</p> <p data-bbox="747 1209 1318 1347">Over 10,000 of SG-38's were built, however due to their wooden structure and rapid development of primary trainers only few of them have survived in 2020's.</p>	<p data-bbox="1346 925 1848 954">The replica aircraft was produced in 2022.</p> <p data-bbox="1346 958 1848 1096">B. Ivanauskas assembled glider to a flyable condition in 2023 and fixed several shortcomings and mistakes in initial construction of the replica.</p> <p data-bbox="1346 1099 1848 1206">The reconstruction included replacement of several structural elements, production and fitting of airfoil.</p> <p data-bbox="1346 1209 1848 1274">All work was performed by B. Ivanauskas alone.</p> <p data-bbox="1346 1278 1869 1347">The aircraft has no registration number. It is property of private collection.</p>

Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
		
<p data-bbox="205 878 520 906"><b>Schneider Grunau Baby IIb</b></p> 	<p data-bbox="751 878 1325 1013">Schneider Grunau Baby was a single-seat sailplane first built in Germany in 1931, with some 6,000 examples constructed in some 20 countries.</p> <p data-bbox="751 1019 1325 1192">Several of the were acquired by Aeroclub of Lithuania in 1930's where they constituted significant share of high-performance gliders. It also served as a basis for development of Lithuanian gliders by B. Oškinis.</p> <p data-bbox="751 1198 1325 1365">Baby IIb with Schempp-Hirth dive brakes, higher maximum take-off weight and even larger ailerons was the most commonly built version. 396 of these were produced in the GDR alone between 1952 and 1957.</p>	<p data-bbox="1350 878 1835 938">The aircraft was produced in 1951, serial No 11.</p> <p data-bbox="1350 945 1835 1047">B Ivanauskas restored glider to a flyable condition during 2010-2011. Test flight – 30.09.2010.</p> <p data-bbox="1350 1053 1856 1156">The aircraft is registered LY-TBA, owned by B. Ivanauskas, based in Pociūnai airfield, Lithuania (ICAO: EYPR).</p>

Aircraft / photo	Description of an aircraft	Works performed by B. Ivanauskas
		
<p><b>SZD 12 Mucha 100</b></p> 	<p>SZD-12 Mucha 100 - a single-seat glider aircraft, designed and built in Poland from 1953. During Cold War many of them were exported into socialist countries and some ended up in Lithuania.</p> <p>Constructed from wood/plywood throughout, the Mucha 100 had smoother surfaces, better aerodynamics and comprehensive instruments and equipment including a KF-18 oxygen system, lighting and instruments for cloud flying, compared to its predecessor. It was extensively used as advanced training and competition glider in 1960's and 1970's.</p>	<p>The aircraft was produced in 1953, serial No 367.</p> <p>B. Ivanauskas restored glider to a static display condition in 2010 on the request of the Lithuanian Aviation Museum.</p> <p>The aircraft is not registered. It is owned by and exhibited at the static display at Lithuanian Aviation Museum (Kaunas).</p>