

## **Triplane glider flight launched by autotowing in 1923**



*The name of István Hosszú<sup>(1)</sup> is well known in Hungarian aviation circles. The main reason of this is that he was the test pilot of Oscar Asboth's helicopter in 1928. However he was known personally by many old glider pilots as he was the glider mechanic for the Air Scouts in 1930s, and after the war he worked for years at Hármashatárhegy gliderfield as a mechanic as well. And it is also known that he performed a couple of autotowed flights with a triplane glider of his design at Sisak in 1923. Sisak at those times belonged to the Kingdom of Slovenes-Croats-Serbs (SHS State) and today belongs to the Republic of Croatia. This event is referred<sup>(2)</sup> to in a couple of Hungarian aviation history*

*books and articles. The present article is the result of the cooperation of Goran Ilić, Nenad Miklusev and myself in 2009 as well as of searches on the internet, and our knowledge regarding this event was supplemented with new informations.*

*Moreover this article disputes certain assertions regarding the flights in question which appeared in a Croatia aviation magazine<sup>(3)</sup> and since then the article<sup>(4)</sup> was adopted by other Croatia aviation magazin<sup>(5)</sup> as well.*

The boy born at Pécs in Hungary at October 31, 1892, was interested in aviation even in his years of apprenticeship and his experimental aircraft models were built one after the other. His career in aviation started at the pilot school of the Austro-Hungarian Empire Flying Corps where he earned his international pilot licence No. 20 at March, 1915. After serving as pilot at the Italian front at 1917 he was appointed as CFI for the pilot school in Novi Sad (then Újvidék). His interest in technical matters and his resourcefulness accompanied him through his whole life. Having studied foreign magazines he started to build a glider even as soon as 1916 but his work was interrupted by the war.

After the end of WWI and the formation of the Kingdom of Slovenes-Croats-Serbs the new state wanted to revitalize aviation in the country. For this aviation equipments and factories spared by the war were available and the Entente states also supported the Kingdom donating aviation equipments. As these states rapidly reduced the capacities of their aircraft industries after the war the Kingdom could rely upon to get only equipment remained from the war. The airforce of the new Kingdom had been organized soon and the first air transportation organizations had been also formed, but their aircraft were rapidly wearing out due to their age, their poor designs and their intensive usage. And because of inexperience numerous accidents also happend. In the ministries for Defence and for the Navy it soon became clear that without creating the Kingdom's own aircraft industry the target could not be met.

For repairing the continuously deteriorating equipments remained after the war above all repairing bases were required. For this reason the Aeroplanska workshop was established at Novi Sad for aircraft repairs and maintenance. All Slavic aircraft technicians to be found in the Kingdom as well as those aircraft technicians of the former Austro-Hungarian Monarchy who were living in the Kingdom called together by the workshop.

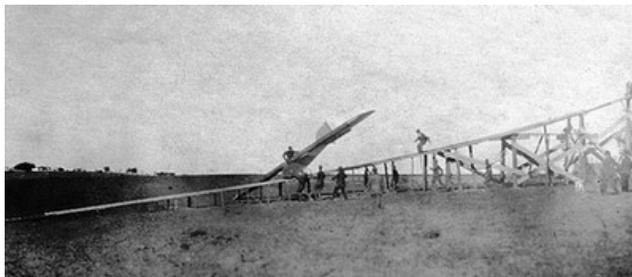
The workshop started its activity collecting all the remained equipments and set them right. Required parts for the repairs were in many cases dismantled from aircraft wrecks selected for this purpose, but new items were also produced. Training, private and sport aircraft were handled alike. The workshop later specialized to build prototypes of new designs<sup>(5)</sup>.



Hosszú-Tišma three-plane glider, 1923

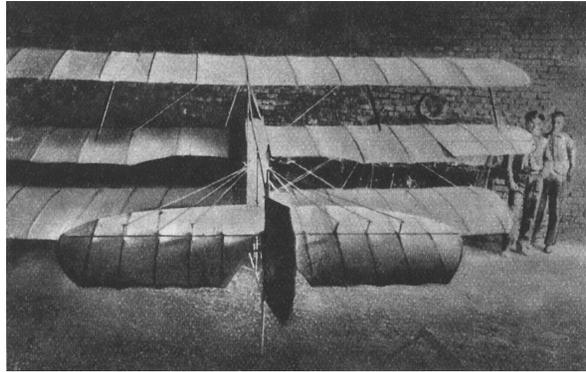
This side-view was published in the monography of the Novi-Sad Aero Club

After the war István Hosszú got to Aeroplanska's workshop as well. In 1922 he started to continue the interrupted building of his triplane glider in addition to his regular work. In the beginning this work progressed slowly, but later it got momentum when an engineer student, reserved military pilot, Vladimir Tišma, who also worked for Aeroplanska, joined him. Tišma obtained his knowledge on aerodynamics and aircraft structures at the Technical University of Prag.



*Note: Certain sources make mention of that engineer Rudolf Fizir and Josif Mikl together with two enthusiasts - István Hosszú and Vladimir Tišma - were designing a new glider. However the facts are that Hosszú with Tisma worked independently, and the Fizir - Mikl duo designed a different glider. This*

*was a high wing monoplane with covered fuselage.*



The wage of Hosszú in these days had been about 30 dinars and he was not able to finish his glider. But he was fortunate as his cousin, Karel Ružička, living in Zagreb, was ready to give financial assistance. He supported his project with 150.000 crowns. Hosszú quit his job at Aeroplanska to have ample time to finish the glider. The news about his project had got around and he received offers from abroad for purchasing the drawings as well the half finished glider. But these offers were rejected by him. However the local aviation authority did not supported his project.

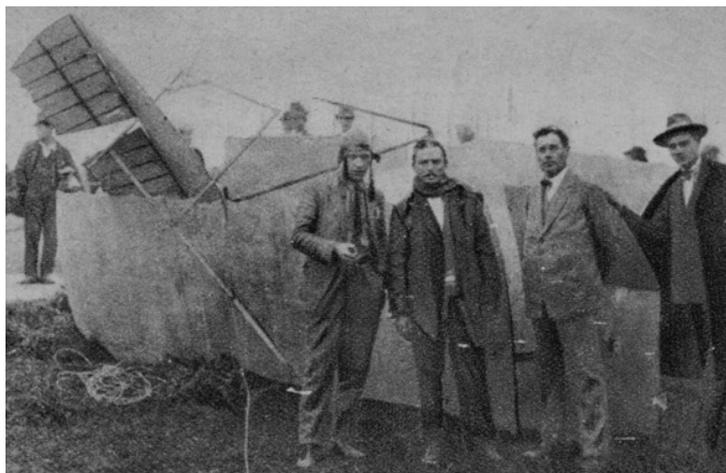


Because of this situation in Novi Sad he wanted to find another city to complete his glider. Just this time a photographer from Sisak, Lipovšić, an enthusiastic supporter of aviation, contacted him. He accepted his invitation and moved to Sisak in 1922. Lipovšić provided hagar (storage) space, materials and working space. The glider was disassembled and rebuilt partly using better materials according to the calculations of Vladimir Tišma. The triplane arrangement was retained at the rebuilt glider, her span was 6 m. The fore part of the 5 m long fuselage got a hood, the rear part was a flat frame structure braced by wires. Two bicycle wheel were used for the landing gear. The seat of the pilot was located in front of the wings. With the tail surfaces the glider could have been controlled safely.

At the second part of September, 1922, a gliding competition was held in England<sup>(6)</sup>. Hosszú was keen on to participate in it, however he was not able to complete his glider because of financial reasons. Then they hoped to present their glider in public flying her in Zagreb at November 4. They reconed upon to find new supporters at this event. However this flight never took place due to unfavourable weather.



The glider was completed at the end of August, 1923. The location for the first flight was selected north of Sisak with a slightly inclined road. At September 29, 1923, Lipovšić was towing the glider piloted by Hosszú with his car running down on the road. A drum with the towing cable coiled on it was fastened to the rear of the car. The glider was connected to the end of the cable which was laid out behind the car. The drum was manipulated by Tišma. When the car reached the speed of 40 km/h Hosszú left the ground and Tišma released the break of the drum. The glider climbed to roughly 15 m altitude and after flying 1700 m distance in tow Hosszú released from the cable and landed. Another couple of similar flights were done, but landing after the last flight the glider was damaged. The flights were watched and confirmed by three observers - G. Cetl, G. M. Popović and G. Kolusi - specifically called upon for this event. The flights as well as the



damaged glider after the last flight were photographed<sup>(6)</sup>.

Hosszú and Tišma did not have financial means to repair the damaged glider. The remains of the glider were stored by Lipovšić, however the further fate of the glider is unknown.

*Note: The source<sup>(2)</sup> mentioned in the introduction describes the flight quite differently. According to this source during the first flight the glider climbed to 80 m and after having released and turned flew 28 minutes in rising air, then landed in 1700 m distance from the start point. Two days later Tišma at the same location and in similar manner was launched and flew for a couple of minutes.*

*This version of the event refuted by the presence of the observers and their report as well as the photographs taken, among them the photograph of the crashed glider on*

*the first day do not speaking of personal accounts of István Hosszú. Unfortunately no newspaper came to the hands of the researchers from which this strange information might have originated. Moreover an expert's opinion(?) is available according to which there is no such hill in the vicinity of Sisak which would have been suitable for slope soaring. And if Hosszú would have been able to fly half an hour climbing from 80 m release height 5 years before Robert Kronfeld performed the first circling thermal flight, then Hosszú's flight certainly would have triggered a world sensation.*

István Hosszú moved to Hungary in the middle of the 1920s where he was soon engaged in testflying Oszkár Asbóth's helicopter.

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- <sup>2</sup> Csanádi-Nagyvárad-Winkler: A magyar repülés története. Műszaki Könyvkiadó, Budapest, 1977.  
Simóné Avarosy Éva: Suhanó famadarak. Háttér Lap- és Könyvkiadó, Budapest, 1989.  
Repülés VII évf. 19. Szám. 1954 okt. 10.
- <sup>3</sup> 'Povijest sporta'. October/November/December 1982.
- <sup>4</sup> 'Hrvatski-Vojnik', broj 264, listopad 2009.
- <sup>5</sup> Labud Kirić: Pojava i prvi uspjesi zračnog jedrenja u Hrvatskoj.  
<sup>5</sup> <http://www.aeromagazin.rs/arhiva/aero21/c20.htm>  
<http://www.aeromagazin.rs/arhiva/aero21/c21.htm>
- <sup>6</sup> This was the English gliding competition held in Itford, where the French Alexis Maynerol with his Peyret-tandem glider achieved a new world record flying for 3 hours and 21 minutes breaking F. H. Hentzen's 3 hours 6 minutes world record had been established one month before on the Wasserkuppe.
- <sup>7</sup> E-mails from Nenad Miklusev and Goran Ilić
- <sup>8</sup> Goran Ilić