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THE FIRST SPORTS AIRCRAFT OF THE AERO CLUB NAŠA KRILA CAUDRON C-27

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Abstract: In November 1922, the third produced copy of the Codron airplane received the official French registration F-AEIC. Registration number 922 was registered to the company M. Caudron from Ischia, i.e. to the company that manufactured the airplane. However, the airplane changed hands very quickly, namely, it was sold to M. Gervies from Paris. In the summer of 1923, M. Gervies' company used the Codron C-27 to conduct aerial surveys of the marshes in the Skopje field for the needs of the government of the Kingdom of Serbia and Montenegro, with the aim of draining the marshes in order to combat malaria. After the surveys were completed, at the end of the summer of 1923, the airplane was offered for sale to the local authorities in Skopje. The General Board of the Aero Club in Skopje immediately showed interest and submitted a proposal to the Ministry of War to accept the offer. The Ministry of War adopted the proposal of the Aero Club to purchase from Marcel Chrétien, a representative of the Gervis company, a Caudron C-27 aircraft (with a 130 hp Clerget engine) and one spare engine. The aircraft was paid for 20,000 French francs, i.e. 75,000 dinars. This training aircraft was in excellent condition, the engine had not run for more than 12 hours. After acceptance, it was handed over to the General Board in Skopje in September 1923. The aircraft flew until August 1926, when it suffered an accident and was no longer repaired.

Keywords: Caudron C-27 aircraft, Aero Club Naša Krila, early aviation history, Skopje air operations, Serbian aeronautical heritage

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Introduction

In November 1922, the third produced example of the Caudron C-27 aircraft received the official French registration F-AEIC. The registration number 922 was recorded under the company M. Caudron from Issy, i.e., the company that manufactured the aircraft itself. However, very soon the aircraft changed ownership, as it was sold to M. Gervies from Paris.⁴[1] Already in the summer of 1923, the firm of M. Gervies used the Caudron, on behalf of the government of the Kingdom of Serbs, Croats and Slovenes, to conduct aerial photography of the marshes in the Skopje Field with the aim of draining the marshes in order to combat malaria.[Naša Krila No. 89, 1931] After the completion of the photography, at the end of the summer of 1923, the aircraft was offered for sale to the local authorities in Skopje. The Main Board of the Aero Club in Skopje immediately showed interest and submitted a proposal to the Ministry of War to accept the offer.

The Ministry of War accepted the Aero Club's proposal to purchase the Caudron C-27 aircraft (with a 130 hp Clerget engine) and one spare engine from Marcel Cretien, the representative of the Gervies firm. The aircraft was paid for 20,000 French francs, i.e., 75,000 dinars. [Naša Krila No. 14, 1925; Naša Krila No. 24 1926] This training aircraft was in excellent condition, with the engine having no more than 12 hours of operation. The aircraft underwent a commission inspection and, in the presence of the commission members, performed two test flights. It was determined that it was a training aircraft, easy to pilot with a low landing speed. The engine performed excellently during the test flights.[4] After acceptance, it was handed over in September 1923 to the Main Board in Skopje. [Naša Krila No. 89, 1931]

The greatest credit for the acquisition of this aircraft goes to Major Dragutin Mišić, commander of the 3rd Aviation Group based at the Skopje airfield, Captains Mato Švarc and Jerolim Novak, squadron commanders in the same group, as well as the other members of the Main Regional Board in Skopje. At that time, the Skopje Regional Board had only two branches, in Skopje and Strumica. Thanks to this aircraft, another thirty or so local branches were established in Southern Serbia and the Raška region. [Naša Krila No. 89, 1931]

The permanent pilot of the aircraft was Mih. Jarošenko (later a pilot with AEROPUT). He converted this ordinary school transition aircraft into an aerobatic aircraft, making it, at the time, the only light civilian aerobatic aircraft. [Naša Krila No. 89, 1931]

⁴ The aircraft had two construction numbers: The first, 5299, indicated it was the 5299th aircraft built by Caudron, while c/n 3 meant it was the third produced example of the C-27 type.

On September 9, 1925, Aviation Day was celebrated in Strumica. A temporary airfield was prepared on the eastern side of Strumica, to the left of the road to Novo Selo. On Sunday, September 9, the C-27 aircraft arrived from Skopje with Obrad Šobajić and pilot Lieutenant Novak. [Naša Krila No. 16, 1925] A month and a half later, at the invitation of several prominent citizens of Bitola, on October 7, 1925, the C-27 aircraft departed for this city with pilot Jarošenko and the secretary of the Main Board in Skopje, Šobajić. Due to bad weather, the C-27 landed in Prilep, where a large crowd quickly gathered. The flight was later continued to Bitola, where the aircraft remained for a day and a half. [Naša Krila No. 19, 1925] In Gevgelija, on February 20 and 21, 1926, an air meeting was held where the Caudron C-27 flew. Šobajić and Jarošenko flew to the air meeting on the aircraft. [Naša Krila No. 22/23, 1926] The Caudron C-27, with Šobajić and Jarošenko, also participated in the aviation celebrations in Veles on May 16, 1926. They departed from Skopje at 10:00, arriving in Veles at 10:35. They landed near the railway station by the football stadium. They took off back at 17:30 and returned at 18:00. Celebrations and lectures took place. They flew at an altitude of 1,100 m on the way there and returned at 800 m. [Naša Krila No. 25 1926] The Caudron C-27, with Šobajić and Jarošenko, also participated in the Vidovdan celebrations in Kosovo in 1926. They landed in front of the monument at Kosovo Field. On the return, they made a forced landing 5 km from Uroševac near the railway line. That evening they spent the night in Uroševac, and the next day, on Tuesday evening, they continued overland to Skopje. It was not until Thursday that Jarošenko returned for the Caudron, accompanied by the mechanic. [Naša Krila No. 26/27 1926]

Soon afterward, a flying day was organized in Skopje. The start was scheduled for 09:00. Among the military aircraft was the Caudron. The aircraft of the local squadron – reconnaissance Breguet XIVs, along with one Daimler from Novi Sad (which had arrived the previous day in rather bad weather, piloted by Russian Colonel Antonov and reconnaissance Lieutenant Šimunović). First, the reconnaissance Breguet XIVs flew, led by Captain Ferdo Gradišnik, followed by Captain Novak with leader Hauptmann and Lieutenant Rus with Sergeant Jelčić. They targeted free balloons. After the reconnaissance group landed, the white Caudron took off to enthusiastic applause, with Jarošenko and Šobajić aboard. After several circuits, the C-27 landed so that Šobajić could disembark, after which Jarošenko performed aerobatics alone. Then the Brandenburg flew with pilot Antonov and observer Šimunović. They were joined by a Breguet with Captain Jerolim Novak as observer. At 1,000 m, Novak jumped from the Breguet, and at 1,200 m, Šimunović jumped. Then from two Breguets and the Brandenburg, the following jumped by parachute: Sergeant Fr. Kerčik from 3,000 m, Sergeant Al. Trajković from 2,000 m, and the Skopje native Arsić from 1,500 m. [Naša Krila No. 30, 1926]

The Central Administration of Naša Krila requested that the Main Board in Skopje send its Caudron aircraft to the Little Entente aviation competition in 1926. In the last week of August 1926, pilot Jarošenko and Obren T. Šobajić departed from Skopje on the Caudron. The Caudron flew the route Skopje – Kumanovo – Preševo – Vranje – Leskovac – Prokuplje – Niš. In Niš, they landed at the City Field to refuel with gasoline they had brought along. They then continued the flight along the route Niš – Aleksinac – Sokobanja – Ražanj – Ćićevac – Paraćin – Ćuprija – Jagodina – Bagrdan – Palanka – Azanja – Velika Krsna – Umčare – Avala – Belgrade – Zemun. During the competition, they did not compete. Due to bad weather, they had to remain in Zemun for several days and only departed for Skopje on the fourth day. They flew the route Belgrade – Ralja – Kosmaj – Palanka – Velika Plana – Jagodina – Ćuprija – Paraćin – Ćićevac – Bratiljina – Đunis – Aleksinac – Niš. They were accompanied by exceptionally poor weather conditions throughout the flight. As they approached Niš, the engine began to fail because the carburetor had been ingesting rainwater mixed with gasoline the entire way. They landed at Crveni Krst in Niš to refuel and then continued the flight hoping for better weather. However, they flew into black, rainy clouds. Near Leskovac, they flew at 10 to 15 meters heading toward Predejane. Since the engine continued to run poorly, they decided to return to Leskovac. They landed on the field between the monopoly warehouse and the football pitch. Unfortunately, while trying to avoid a horse, they hit unfinished trenches that had existed in that place since 1915. The aircraft did not overturn, but its landing gear, lower right wing, and propeller were broken. The wheels remained intact. [Naša Krila No. 89, 1931]

The dismantled Caudron was sent to Novi Sad in 1928 for repair, which was never carried out. The spare Clerget engine remained in Skopje. [Naša Krila No. 89, 1931]

The Caudron was deleted from the French register only in October 1931.

General History Caudron C.27

(*Jane's All the World's Aircraft 1923; Jane's All the World's Aircraft 1924*)

The Caudron C.27 was a French two-seat biplane basic trainer and touring aircraft developed in the early 1920s by Société des Avions Caudron.

Designed as an intermediate trainer between the wartime Caudron G.3 and the more advanced C.59, the C.27 first flew around mid-1922 (exact date uncertain, public debut at Orly in late June 1922). It was presented at the 1922 Paris Air Salon as a simple, forgiving aircraft suitable for basic training, aerobatics, and light touring.

The type proved popular in civil aviation in France and abroad, known for its excellent handling, low landing speed, and aerobatic capability. Notable achievements include:

- Pilot **Georges Patin** winning the 1924 Zenith Cup (fuel efficiency and load-carrying contest).
- French aviatrix **Adrienne Bolland** performing 212 consecutive loops in a C.27 on 27 May 1924 at Orly, setting a women's aerobatic record.

Results General Design Features

(Prospectus d'usine, 1923)

- Configuration: Conventional two-bay equal-span biplane with no stagger and minimal dihedral; fabric-covered wooden wings (two spars) with parallel inter-plane struts and piano-wire bracing; ailerons only on the upper wing.
- Fuselage: Simple cross-braced beam structure, fabric-covered, with tandem open cockpits (pupil forward, instructor aft with a rounded cut-out for visibility).
- Tail: Long shallow triangular fin with a straight-edged balanced rudder extending to the keel; tailplane mounted on top of the fuselage with centrally cut-away elevators for rudder clearance.
- Undercarriage: Fixed tailskid type with wheels on a single axle supported by V-struts from the lower fuselage (initially with shock absorbers, later simplified).
- Construction: Primarily wood with fabric covering; lightweight and forgiving handling made it ideal for basic training and aerobatics.
- Crew: 2 (tandem seating).

Key Variants and Engine Options

The C.27 had several designations due to minor changes and engine swaps:

- C.27 (original, 1922): 80 hp (60 kW) Le Rhône 9C 9-cylinder air-cooled rotary engine.
- C.127 (mid-1924 redesignation): Minor changes, same Le Rhône 9C.
- C.125 (from 1925): Fitted with 130 hp (97 kW) Clerget 9B 9-cylinder rotary (the version used in the Yugoslav example F-AEIC).
- C.128 (later): 120 hp (89 kW) Salmson 9AC 9-cylinder radial; increased span/area (~14% heavier empty weight); some three-seaters with an extra cockpit aft.

At least one flew with a 70–80 hp Anzani engine. Total production was modest (over 20 built, with ~21 on French civil register across variants).

Technical Specifications

(C.127 base variant; 130 hp Clerget versions were similar but slightly improved in performance)

- **Length:** 8.30 m (27 ft 3 in)
- **Wingspan:** 12.00 m (39 ft 4 in) upper/lower (C.128 increased)
- **Height:** 2.83 m (9 ft 3 in)
- **Wing area:** 34.50 m² (371.4 sq ft)
- **Empty weight:** 510 kg (1,124 lb)
- **Gross weight:** 794 kg (1,750 lb)
- **Fuel capacity:** 107 kg (236 lb)
- **Powerplant:**
 - Standard: 80 hp Le Rhône 9C rotary, 2-bladed propeller, partial cowling (upper three-quarters).
 - 130 hp Clerget 9B (C.125): 9-cylinder rotary, air-cooled, 2-bladed fixed propeller.
- **Performance (C.127/Le Rhône):**
 - Maximum speed: 132 km/h (82 mph, 71 kn)
 - Stall speed: 50 km/h (31 mph, 27 kn) — exceptionally low for safe training
 - Service ceiling: 4,000 m (13,000 ft)
 - Wing loading: 23.0 kg/m² (4.7 lb/sq ft)
- **Handling notes:** Very agile, excellent for aerobatics; low landing speed and forgiving characteristics made it popular for civilian use and competitions.

The 130 hp Clerget-powered version (like the one in Yugoslavia) offered better performance than the base 80 hp model while retaining the same forgiving flight qualities.

References

1. Jane's All the World's Aircraft 1923: Jane's All the World's Aircraft 1923, (edited by C.G. Grey), Sampson Low, Marston & Co., Ltd., London 1923
2. Jane's All the World's Aircraft 1924: Jane's All the World's Aircraft 1923, (edited by C.G. Grey), Sampson Low, Marston & Co., Ltd., London 1924
3. Naša Krila No. 14, 1925: The Aero Club's Aircraft, Naša Krila No. 14, 1925
4. Naša Krila No. 16, 1925: News, Naša Krila No. 16, 1925.
5. Naša Krila No. 19, 1925: News, Naša Krila No. 19, 1925.
6. Naša Krila No. 22/23, 1926: News, Naša Krila No. 22/23, 1926.
7. Naša Krila No. 24 1926: News, Naša Krila No. 24, 1926.
8. Naša Krila No. 25 1926: News, Naša Krila No. 25, 1926.

9. Naša Krila No. 26/27 1926: News, Naša Krila No. 26/27, 1926.
10. Naša Krila No. 30, 1926: Aviation Day in Skopje, 26.09.1926, Naša Krila No. 30, 1926.
11. Naša Krila No. 89, 1931: Reminiscence of the Last Flight of the First Civilian Aircraft in Our Country (Caudron of the Main Board of the Aero Club in Skopje), Naša Krila No. 89, October 1931.
12. Prospectus d'usine, 1923: Société des Avions Caudron C 127 prospectus d'usine, 1923

Radivojević, M., Pavlović, N., Özbaran, B. (2025) The first sports aircraft of the aero club Naša krila Caudron C-27 In: Dašić, D. (ed) Sporticopedia SMB2025, Vol 3, No 1, 329-336