

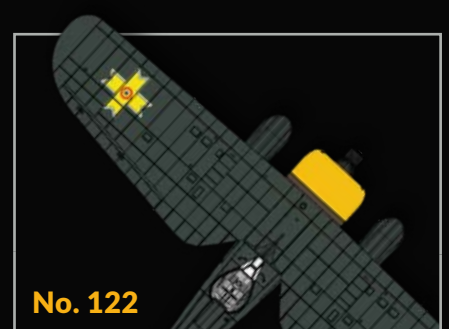
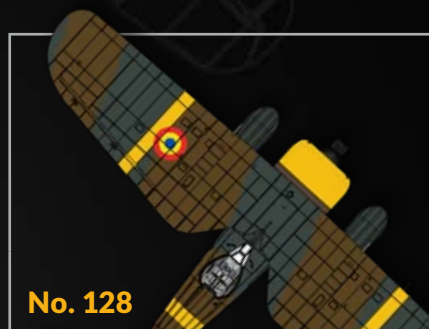
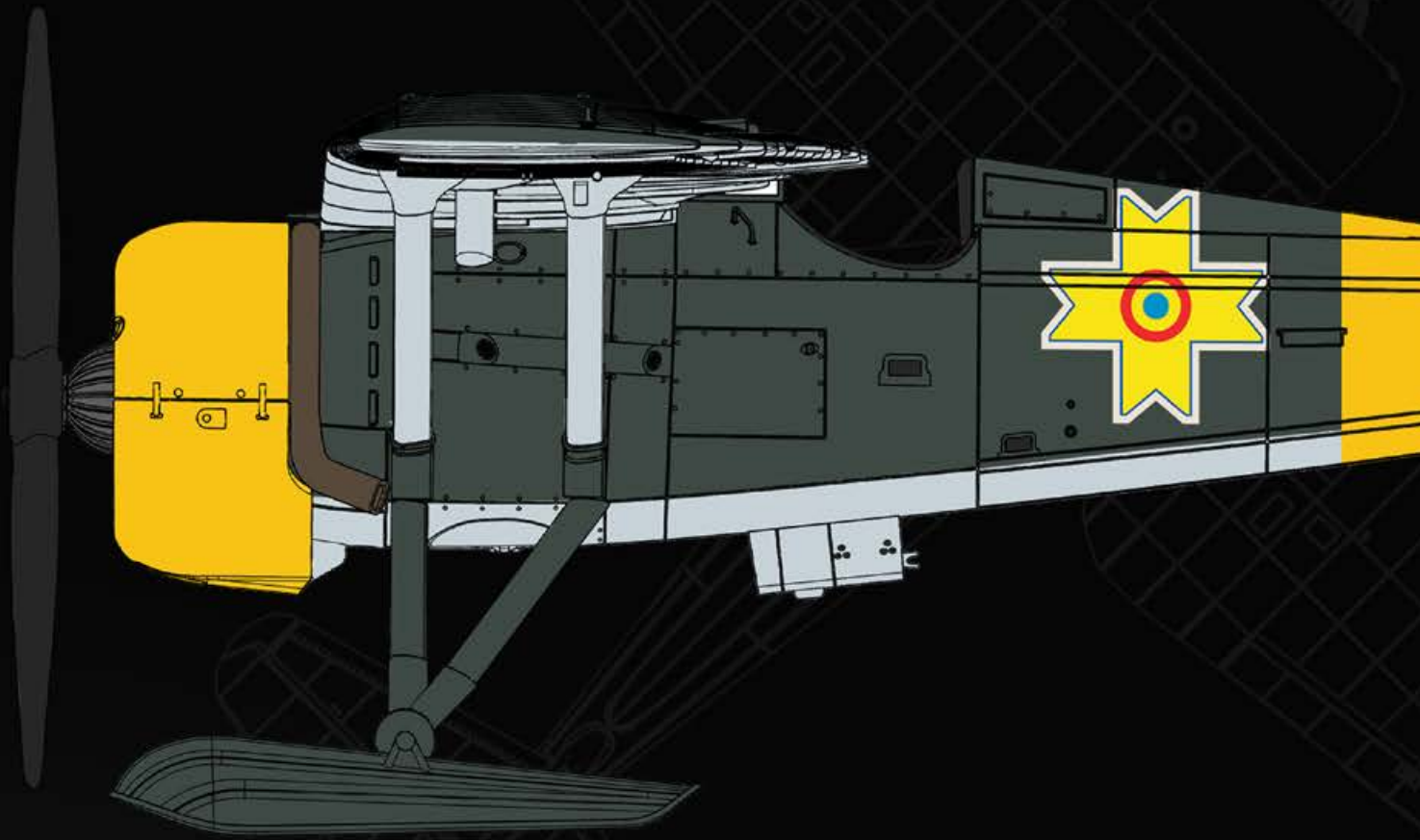


PZL/IAR P.11F

ROMANIAN FIGHTER

ON SKIS

MICHAŁ SKAWIŃSKI



COLOUR OPTIONS FOR IBG MODELS KIT No. 72522



Many of us associate Romania with warm and sunny weather. In reality, however, it is a country with a continental climate and vast upland and mountain areas, where summers are indeed hot, but winters can be very cold and snowy. Looking at the weather reports from the 1930s and 1940s we can observe that periods from December to February were characterised by temperatures below zero and significant precipitation. To facilitate air operations during these months, the Romanian Air Force was using locally-developed skis at least since the early 1930s. PZL P.11F fighter thus equipped is a subject of the IBG 1/72 model kit no. 72522.

This eBook gives additional information on the colour options contained in the box. It is worth noting that Romanian airplane camouflages and markings of the period are not well covered in the references published so far. Some of the results of research conducted for the kit are described below, nevertheless this topic definitely requires a separate treatment. It should also be noted that very significant effort was put into making kit decals as accurate and detailed as possible. However, not all photos and documents available for analysis could be included in this publication.



I would like to warmly thank Dan Antoniu, Tomasz Kopański and Horia Stoica for the openness, willingness to help, guidance, thoughts and documentation shared from their vast collections. Without them, this publication would not be possible.

Michał Skawiński

Skis for P.11F

The production of aircraft skis in Romania probably started in the early 1930s. These were long, narrow skis, providing good stability during take-off and landing, but arguably making it difficult to manoeuvre the aircraft on the ground. They were initially manufactured by the I.A.R. company and

in various variations were used on the Potez XXV, Morane-Saulnier MoS-35 Ep2 and Loire Gourdou-Leseurre LGL.32 C1 aircraft produced under licence. Similar type of skis also appeared in the second half of the 1930s on PZL P.11B fighters delivered from Poland.



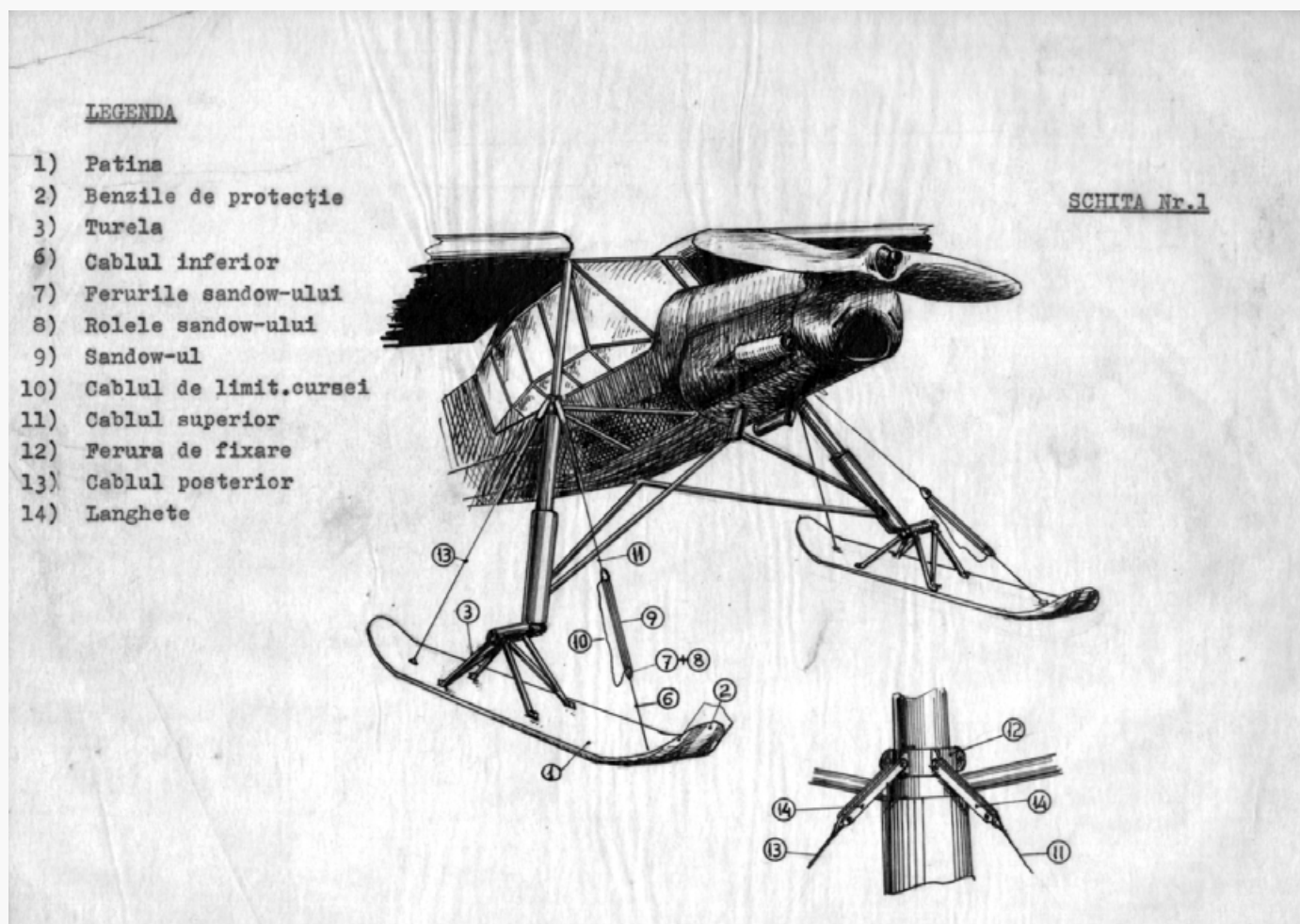
» Long, narrow skis of I.A.R. manufacture fitted to P.11B in the winter of 1936/37. (Dan Antoniu/Horia Stoica collection)

The first known reference to the skis for P.11F fighter dates from late November 1937 and is related to the strengthening of the undercarriage by I.A.R. in order to accommodate increased loads associated with landings on skis. The type of skis to be used at that time is unfortunately unknown. In the late 1930s, in line with the trends of the time, shorter

and wider skis were designed for the airplanes of Aeronautica Regală Română. Their production was undertaken by the ICAR factory and they were put into service no later than in 1940. The new skis were made of wood and shod with three metal strips. They did not yet have aerodynamic fairings on top of the skid.



Two photographs of P.11F No. 83 wrecked in the winter of 1940/41. On the sides of the burnt-out fuselage there are visible wide skis without aerodynamic fairings, shod with three metal protective strips. The N-shaped truss is well visible. (Dan Antoniu/Horia Stoica collection)



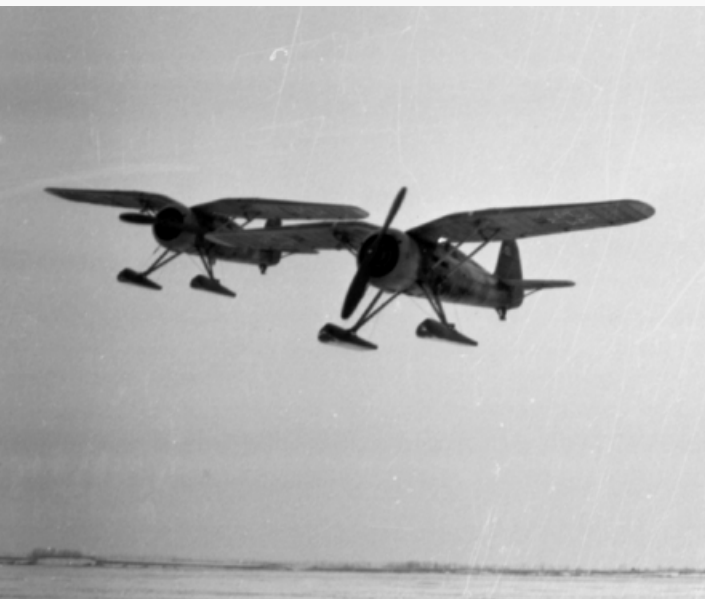
Skis produced by ICAR company installed on Fi-156 (version without aerodynamic fairings). Visible are the N-shaped truss and three metal reinforcement strips on the underside of the skis. The components described are almost identical to the skis on the P.11F. 1 – skid, 2 – protective strips, 3 – turret (called N-shaped truss in the eBook), 6 – lower wire, 7 – expander ferrules, 8 – expander rollers, 9 – expander (elastic rope), 10 – wire for limiting the travel of expander, 11 – upper wire, 12 – attachment ferrule, 13 – rear wire, 14 – links. (Dan Antoniu/Horia Stoica collection)

The final and best known version appears to have been a development of the skis presented above. The general design and principle of operation was retained, but aerodynamic fairings were added above the skis to reduce drag in flight. These most likely consisted of a metal or wooden structure covered with canvas. Photographic

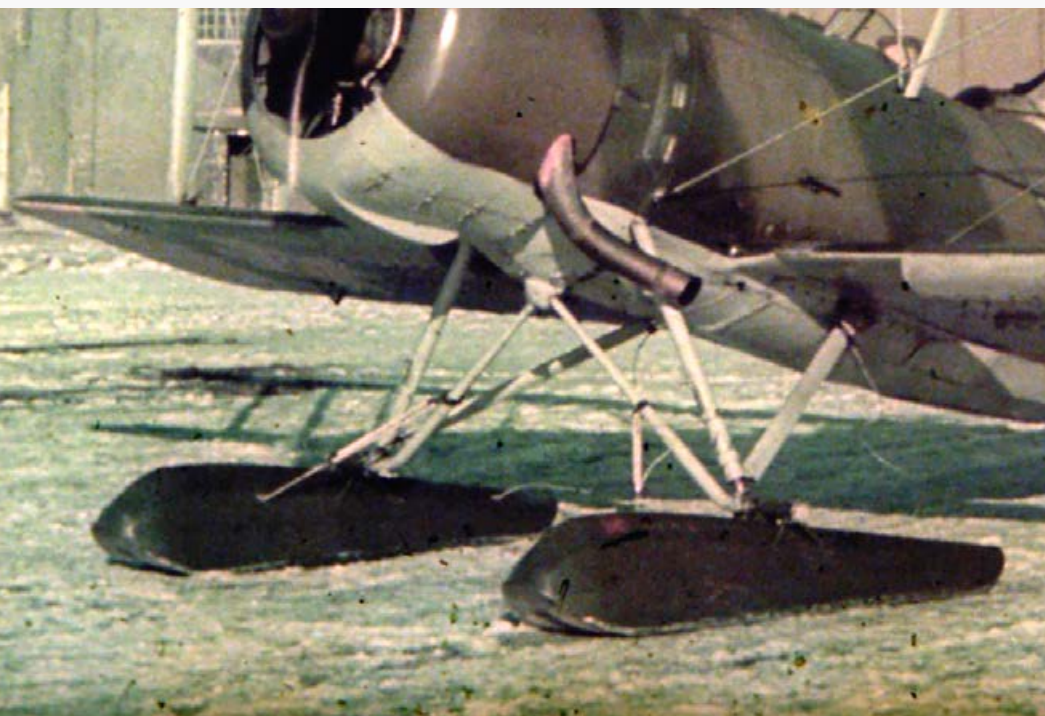
evidence shows that type of skis was used at least on P.11B, P.11c, P.11F and SET-7 airplanes. The first photos of this variant come from the winter of 1940/41 and it is this version that is included in IBG model of P.11F (cat. no. 72522).



” P.11F in the winter of 1940/41 with the final type of skis. Visible is the N-shaped truss protruding from the top of the fairing and the arrangement of wires adjusting the position of the skid. This suggests that the version with fairings was a development of an earlier form of ski, shown in the drawing above. (Dan Antoniu/Horia Stoica collection)



” The wires seen in the photos and the drawing were intended to adjust the skid alignment. To reduce drag in flight, the skid had to be laid horizontally - the rear wire was then fully tensioned and the front wire shortened by the expander. After landing, the skid had to be tilted backwards, which had the effect of loosening (and sagging of) the rear wire and lengthening the front wire thanks to the expander. (Dan Antoniu/Horia Stoica collection)



” Photo at left shows the aerodynamic skis on the SET-7KB airplane and gives us important information on their overall green finish with metal strips visible underneath. Worth noting is also a very heavy sagging of the rear wire, much more pronounced than in the PZL fighter. This resulted in a different alignment of the skis during flight than in the P.11F. The very rare photo at right (unfortunately there is no better frame available) illustrates this well. As the pilot had no means of controlling the length of the wires, this alignment of the skids was almost certainly not dedicated specifically for landing, but was typical for all stages of the flight of this airplane. The arrangement seen on the SET-7 provided safer landings, but definitely reduced the maximum speed of the aircraft, which, however, was not an issue in this case. (Dan Antoniu/Horia Stoica collection)

Option 1

PZL/I.A.R. P.11F NO. 57**FLOTILA 2 VÂNĂTOARE / TÂRGȘORU NOU AIRFIELD / EARLY 1941**

Târgșoru Nou airfield is located just a few kilometres to the west of Ploiesti, a large centre for oil extraction and refining. It was an area extremely important for Germany, which in 1940 imported as much as 8 million barrels of oil from Romania, making it the leading foreign supplier. As early as October 1940, the two countries signed an agreement whereby Wehrmacht and Luftwaffe units, including anti-aircraft artillery, were introduced into Romania. Flak units were deployed to protect Ploiesti from possible raids by British bombers taking off from Greece. The fighter cover at the time was the responsibility of Romanian Flotila 2 Vânătoare. It was the first unit to receive I.A.R. 80 fighters, but older P.11Fs, including No. 57, also served alongside.

In the second half of 1940 the Romanian fighter fleet began to be repainted in two-tone camouflage, in case of No. 57 of the 'stripes' type. In all probability top colours were dark olive green and terracotta (although the latter could also have been khaki-yellow). Undersurfaces were blue-grey. Aircraft sported a full set of recognition markings that were mandatory at the time: cockades on the wings, tricolour on the rudder, yellow 25cm bands on the wings and fuselage (introduced in October 1940 as a recognition aid for German airplanes operating from Romania) and yellow engine cowling.



]] A view of the Târgșoru Nou airfield in April 1941. At the time, the airfield was undergoing expansion and an additional four, much larger hangars were being built to the left of the two older ones visible in the photo. Towers of the Biserica Sfinții Voievozi church are well visible behind the hangars. As every Romanian P.11F differed a bit in camouflage and placement of markings, it is often possible to identify individual airplanes even from the distance. In the row there are (left to right) No. 54, No. 51, No. 57, No. 120, unknown, unknown, unknown, No. 121. One of the unknowns is most likely No. 128. To the bottom of the photo we can see Luftwaffe soldier and a small fragment of Junkers Ju 52 wing. At that time the airfield was also home to Transportstaffel VIII. Fliegerkorps. (Tomasz Kopański collection)



】 A slightly earlier photograph, taken on 1st February 1941. Four P.11F can be seen with skis installed. On the left, the hangars known from the previous photo. In the background, directly behind the aircraft is the 'Pavilionul Administrative' - the administrative building. This was a fairly typical structure, also known from other airfields in Romania. (Tomasz Kopański collection)

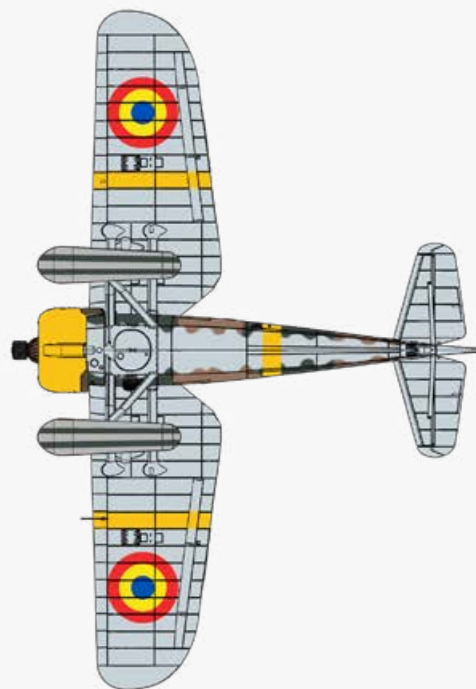
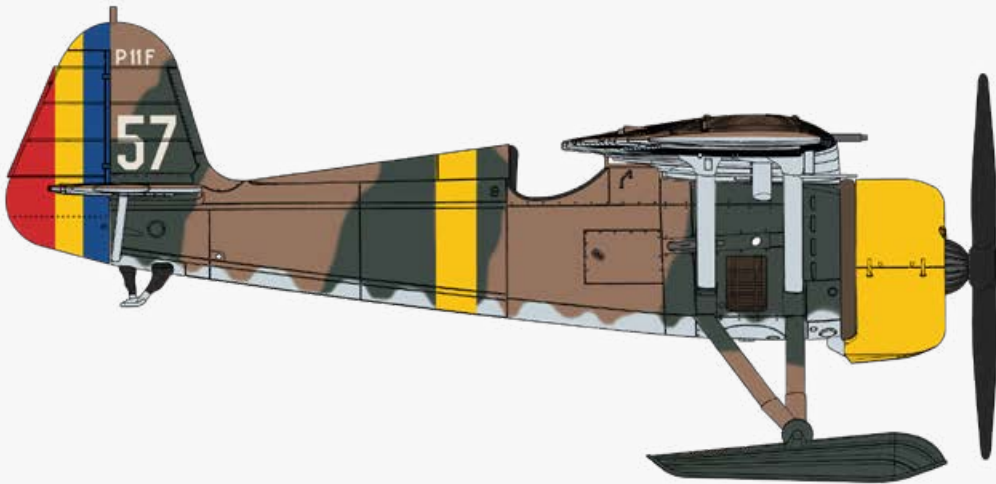
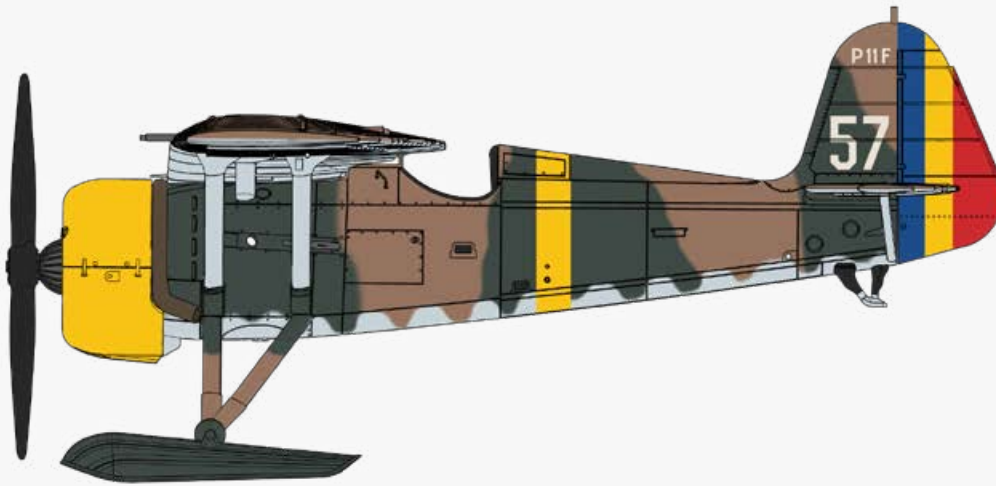


】 A close-up view of the parked P.11F fighters. No 57 is distinguished by its lighter camouflage colour, most likely terracotta or khaki-yellow. Typical markings of the time are visible on all three aircraft - cockades, 25cm yellow stripes on the wings and fuselage, yellow engine covers. (Tomasz Kopański collection)



There is snow, but there are no skis! In fact this photo was taken in the winter of 1940-41 before the skis were installed or after they had already been replaced with wheels. It also reminds of the fact that aeroplanes with wheeled undercarriage can take off and land on snow, but there are additional risks involved. Interesting details include the markings mentioned earlier, white number '57' and the inscription 'P 11 F' on the fin. Well visible is the way the wing struts were painted, note also that undercarriage legs were blue-grey on the underside, but covered in camouflage on top. Both outer and inner wheel surfaces were painted most likely dark olive green. Propeller nut was left natural metal. Bomb racks of the IAR-Barbieri system are visible under the wings. (Dan Antoniu/Horia Stoica collection)

PZL/I.A.R. P.11F NO. 57, FLOTILA 2 VÂNĂTOARE, EARLY 1941



Option 2

PZL/I.A.R. P.11F NO. 128**FLOTILA 2 VÂNĂTOARE / TÂRGȘORU NOU AIRFIELD / EARLY 1941**

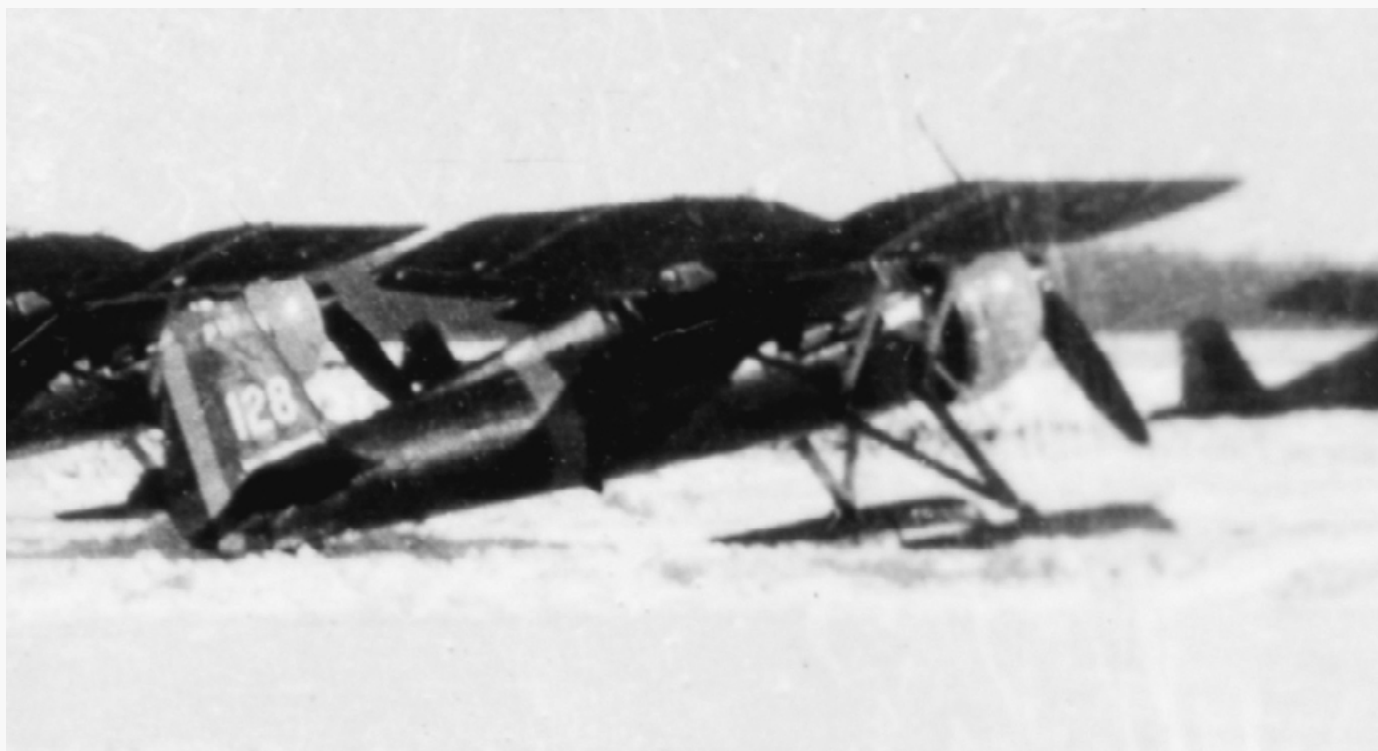
This is another airplane from Flotila 2 Vânătoare, both No. 128 and No. 57 (see option 1) stationed together at Târgșoru Nou in early 1941.

Although repainted at approximately the same time as No. 57 and in the same general camouflage scheme, there are some differences between the two airplanes. The first one

is the use of a darker colour next to the dark olive green - most likely dark brown or khaki-brown. The standard set of markings consists of cockades on the wings, a tricolour on the rudder, a yellow engine cowling and 25cm stripes on the wings and fuselage, but the latter was placed further to the rear than on the No. 57. Finally, the propeller manufacturer's logo is also different.



” Photo of No. 128 taken on 20th January 1941. The wavy division line between the upper and undersurface colours on the fuselage is typical for the 'stripes' camouflage. The location of the yellow stripe on the fuselage is clearly visible, but the type of photographic material makes the stripes on the wings very faint. It is worth noting the way the wing struts and landing gear legs are painted. Aircraft number 120 is in the background. (Tomasz Kopański collection)

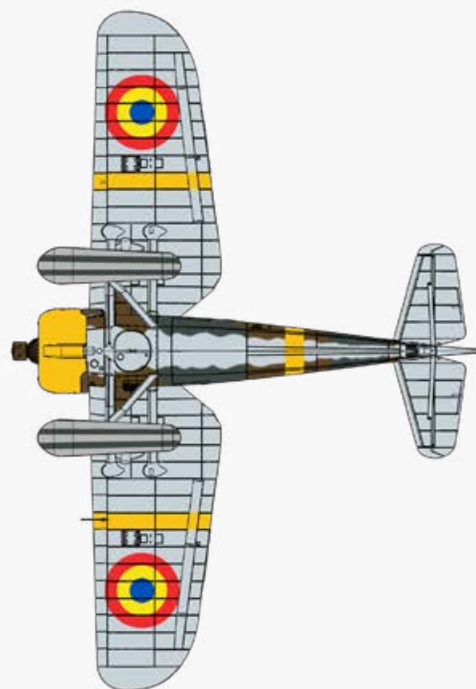


Close-up of aircraft No. 128 from the photograph shown in the section on No. 57. Visible are the markings on the upper surfaces of the wings - cockades and yellow stripes. (Tomasz Kopański collection)



Final photo of this aircraft taken in the winter of 1940-41 again proves that minimal amounts of snow do not necessarily warrant switching to skis. The location of the underwing cockades and stripes on the wings can be seen well. Note the natural metal propeller nut and the manufacturer's logo on the blades. This airplane has a small-bomb or grenade dispenser installed inside the wing (with a sliding cover). Unlike No. 57, the inner surfaces of the wheels are painted blue-grey. (Tomasz Kopański collection)

PZL/I.A.R. P.11F NO. 128, FLOTILA 2 VÂNĂTOARE, EARLY 1941



Option 3

PZL/I.A.R. P.11F NO. 122**FLOTILA 3 VÂNĂTOARE / GALAȚI AIRFIELD / EARLY 1943**

The last option shows the P.11F in the late period of its career, serving as an aircraft towing aerial targets to allow gunnery training for the pilots of Flotilla 3 Vânătoare equipped with I.A.R. 80.

Airplane No. 122 was finished in uniform dark olive green on the upper surfaces, a scheme that replaced the two-colour camouflage in late 1942. Characteristic feature

of the new scheme (but not exclusive to it) was the straight dividing line between the upper and underside colours. The aircraft sported full set of markings mandatory at the time: crosses (introduced in May 1941), a yellow 50cm stripe on the fuselage and wingtips undersides in the same colour (introduced in June 1941 in connection with Operation Barbarossa) and a yellow engine cowling (reintroduced in September 1941).



» Aircraft No. 56 and No. 122 being prepared for take-off during the winter of 1942-43. The airplanes bear markings typical of the period - crosses on the fuselage and wings, yellow engine covers, 50cm stripe on the fuselage and yellow wingtip undersurfaces (in case of the latter, they blend with the blue-grey on the black and white photographs). Note the difference in colour of the central dot between crosses on the fuselages, much lighter on aircraft No. 122. (Dan Antoniu/Horia Stoica collection)



Close-up of the cockpit. Just behind the pilot's headrest a circular skin patch can be seen where the antenna insulator was previously fitted (the aircraft had no radio installed). Note the wear of the paintwork and the fact that the cross on the visible right side of the fuselage was slightly further back than on the left side. (Dan Antoniu/Horia Stoica collection)

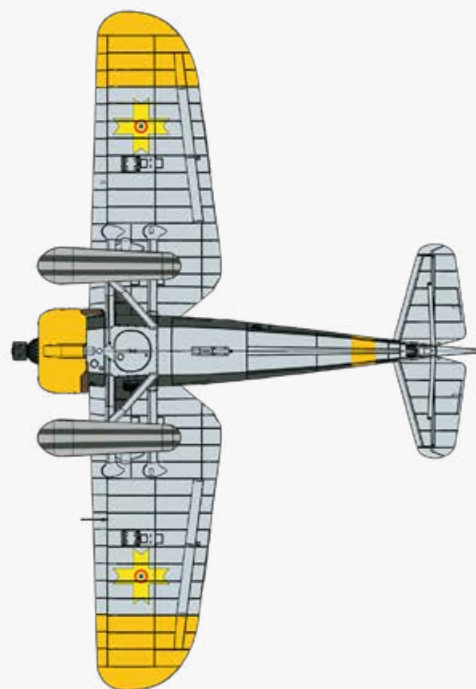
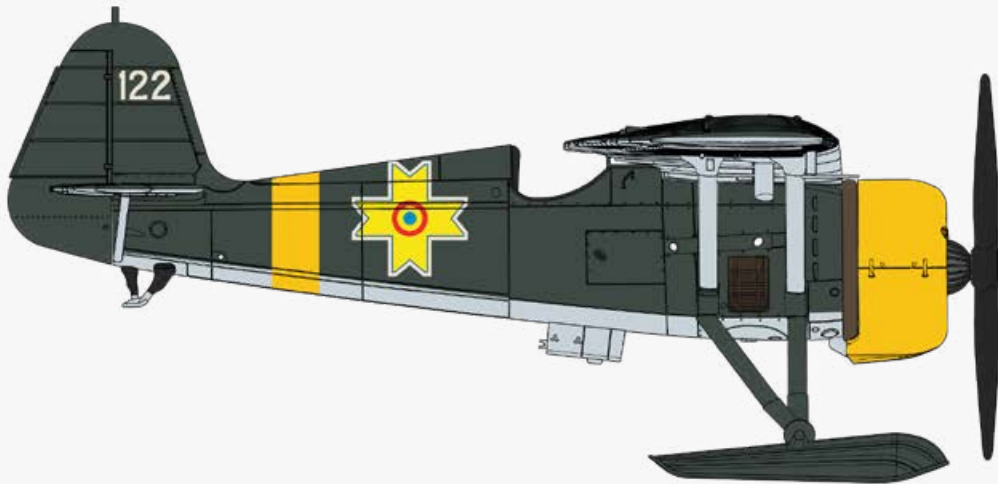
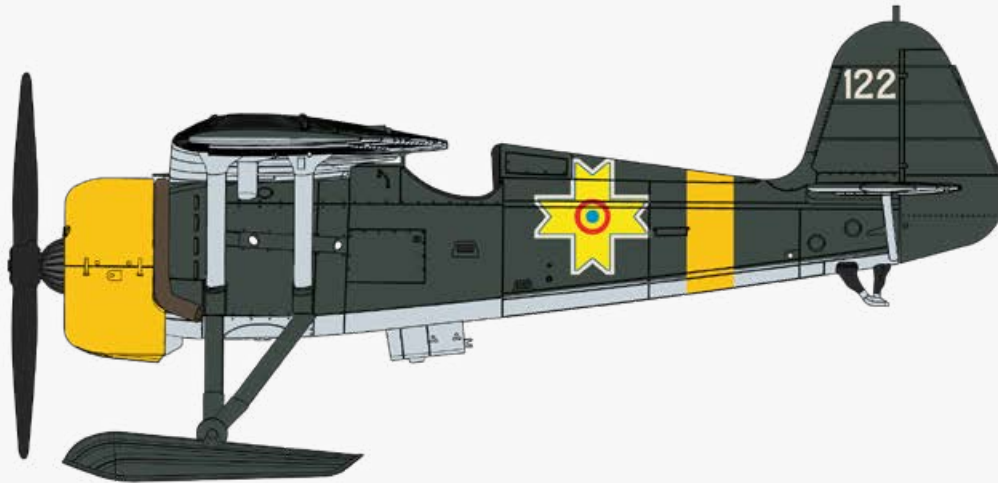


Last moments before take-off. In front of the aircraft two fire extinguishers can be seen. They were always kept on standby during engine start-up. This photo shows that, unlike the fuselage, the crosses on the lower surfaces of the wings had dots in the same colour as the cross rim. The aircraft had the armament removed, but the holes in the wings were not covered with plugs. Same as No. 128 this airplane has a small-bomb or grenade dispenser installed inside the wing (with a sliding cover). (Dan Antoniu/Horia Stoica collection)



” This view gives us a good insight into a non-standard element under the fuselage, most probably an attachment for towing air targets. The presence of the gunsight is notable, especially as the armament has been removed. Typical of the ski position of an aircraft standing on the ground, the rear wire is not tensioned. It is also worth looking again at the national markings on the fuselage - the central blue dot is noticeably lighter than the blue rim of the cross. A close examination of the buildings visible in the series of photographs taken on this occasion (of which only part is published here) allows us to conclude that they were taken at Galați airfield. (Dan Antoniu/Horia Stoica collection)

PZL/I.A.R. P.11F NO. 122, FLOTILA 3 VÂNĂTOARE, EARLY 1943



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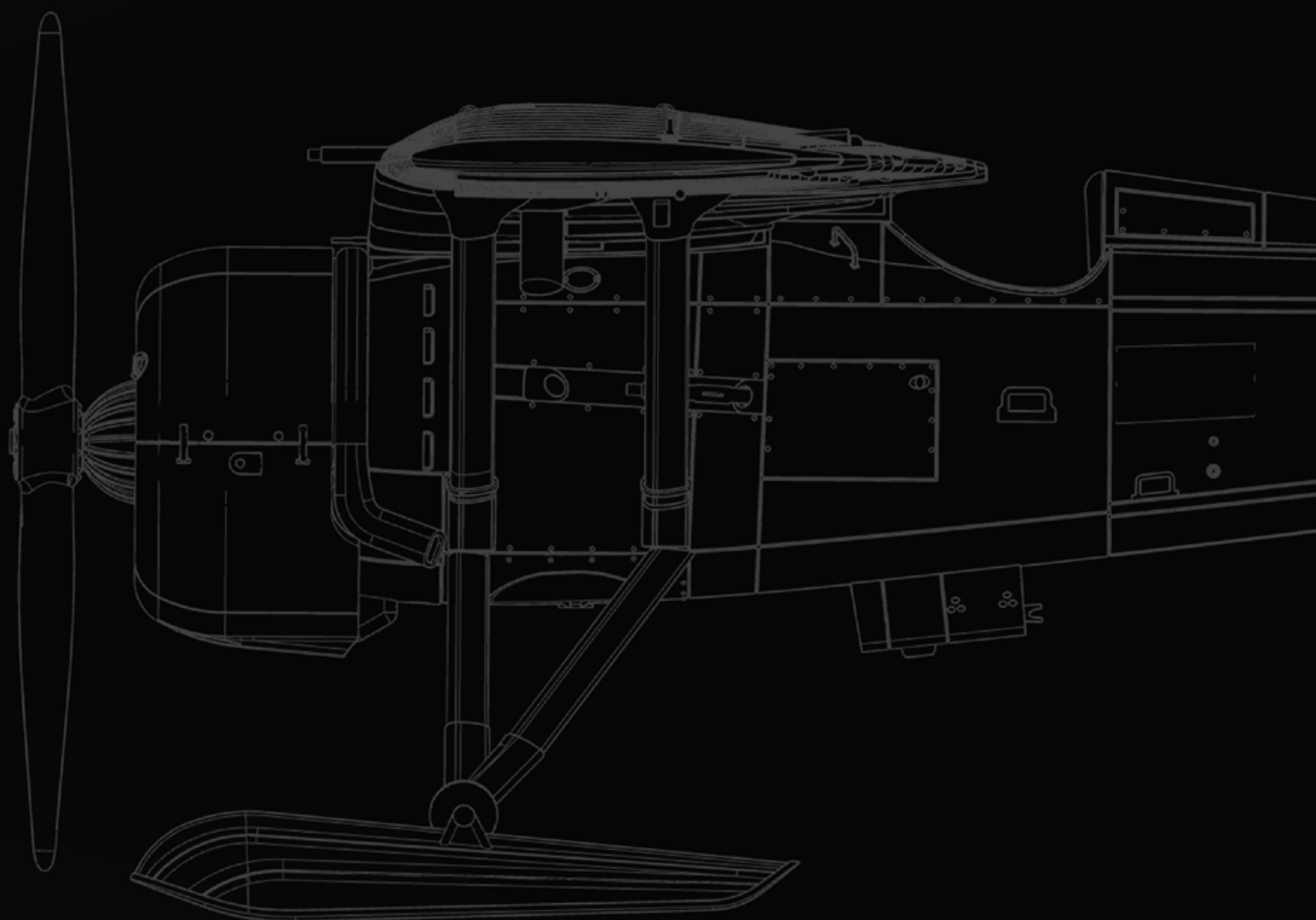
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