Yakovlev AIR-7

Once Yakovlev graduated from the Military Aviation Academy in April 1931, he joined GAZ n°39, in what would be the working group on the new fighter for VVS, the I-5.
At the time of joining the team the I-5 was in full production, powered by the licensed version of the Bristol Jupiter, the M-22. The engine delivered an output of 480hp giving the fighter a top speed of 278km/h at sea level.
Together with the team, Yakovlev comes up with the idea of designing a monoplane, using the engine of the I-5 and pushing for the goal of the epoch, the 300km/h mark.
The idea became an obsession. Consultations with experts in structures, aerodynamics and design confirmed the feasibility of the idea. Preliminary estimates indicated that a speed of 320km/h could be reached, even with a payload.
Yakovlev interpreted the payload as a passenger or the possibility of transporting printing matrixes for the newspapers Islzvestia and Pravda towards the distant capital cities of the Soviet Republics.
At the beginning of the detail design the project takes the AIR-7 name. But Yakovlev was just an employee. He needed the Osoaviajim approval and authorization of the VVS.
By February 1932 the Osoaviajim allocates funds and gives its support, but not the VVS, which doesn't give a full approval.
With everything organized he forms a small group of workers and young engineers who with great excitement begin with the preparation plans.
The actual construction began in April 1932 and by late August the AIR-7 and was rolling on the Central Airfield. Nothing even remotely resembling it has been seen before in the Soviet Union .
With the distinctive red and silver Yakovlev colors, In November 19th 1932 the test pilot Yulian Piontkovskii achieved the first successful flight of AIR-7, with 80kg of fixed ballast in the rear cockpit. Yakovlev occupied the back seat on the second flight "...anxious with the desire of reading 330km/h in the indicators".

By 1933, the AIR-7 had some slight modifications, rectangular windows on each side of the cockpit, a canopy redesign and a new landing gear layout, with a strut fairing located outside the trousers.
The flights of the AIR-7 go on. By September the 25th 1933, with Piontkovskii at the controls, the engine power is increased from 1870 to 1950rpm. At full throttle and already in altitude, the instruments start to show what Yakovlev was looking for since a year ago... 332km/h. A new national speed record is set.
The Osoaviajim proposed a decoration, and it's rumored that a small fleet of AIR-7 could be built for Aeroflot's VIP transport .
A Special demonstration is scheduled before the officers of the VVS, and Osoaviajim Vice-Chairman climbs as a passenger.
Unfortunately, in spite of the aircraft's performance, the right wing aileron of the AIR-7 starts to "flutter" and it's destroyed.
With the machine out of control a spectacular emergency landing is achieved, saving the crew, but not the airplane's future.
As the "flutter effect" was not yet known at the time, Yakovlev admitted the accident was because he had made a miscalculation. By early 1932, "Yakovlev was forbidden to continue working on the design...", the AIR-7 never flew again.

Wingspan: 11m
Lenght: 7,80m
Weight (w/max. load): 1400kg
Max. speed: 332km/h
Autonomy: 5 horas
Landing speed: 90km/h

Source:

- "Yakovlev Aircraft since 1924" - Bill Gunston, Yefim Gordon. 1997. Putnam
- "Kryl'ya Rodiny" N°7/1997
- "L+K" 80/354

HUMBROL		
A	87	Matt Steel Grey
B	27	Matt Sea Grey
C	56	Aluminium
D	62	Matt Leather
E	19	Bright Red
F	67	Matt Tank Grey
G	64	Matt Light Grey
H	11	Silver
I	53	Gunmetal
J	22	White
K	33	Black

Yakovlev AIR-7 1/72
Soviet Speed Record

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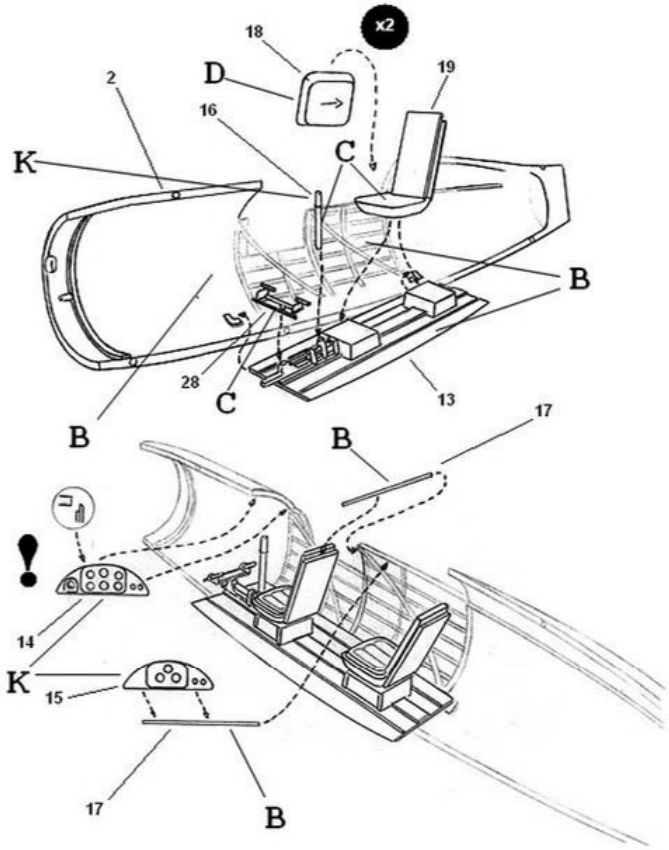

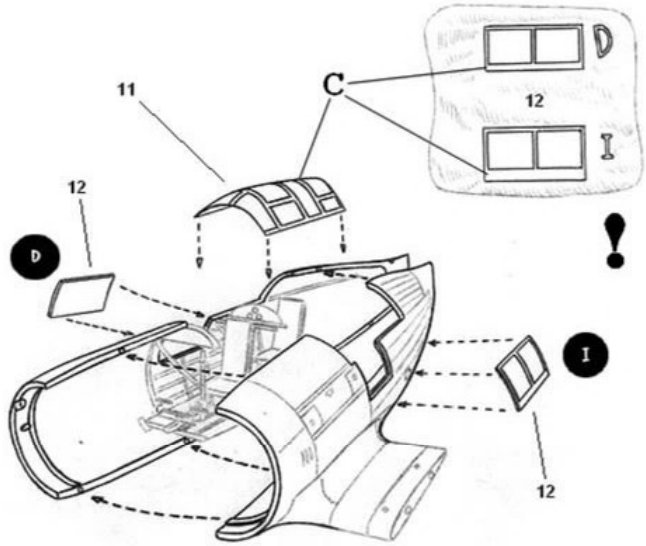

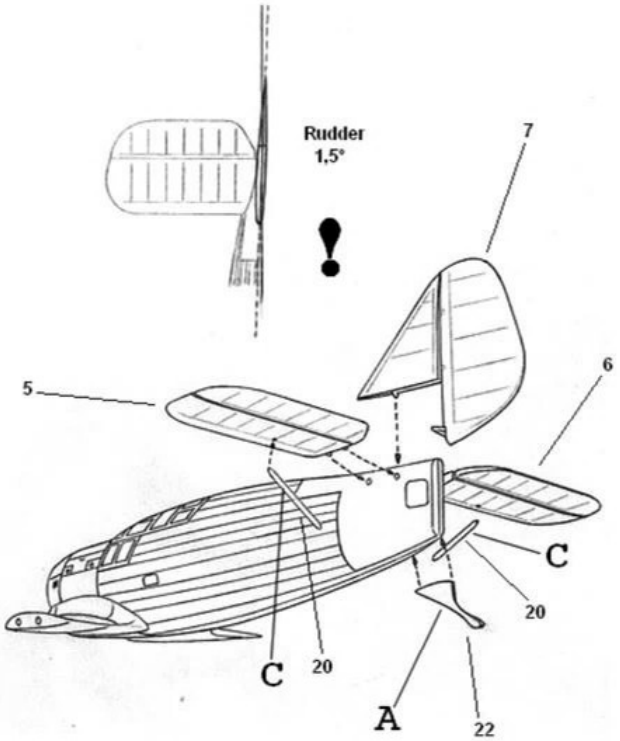

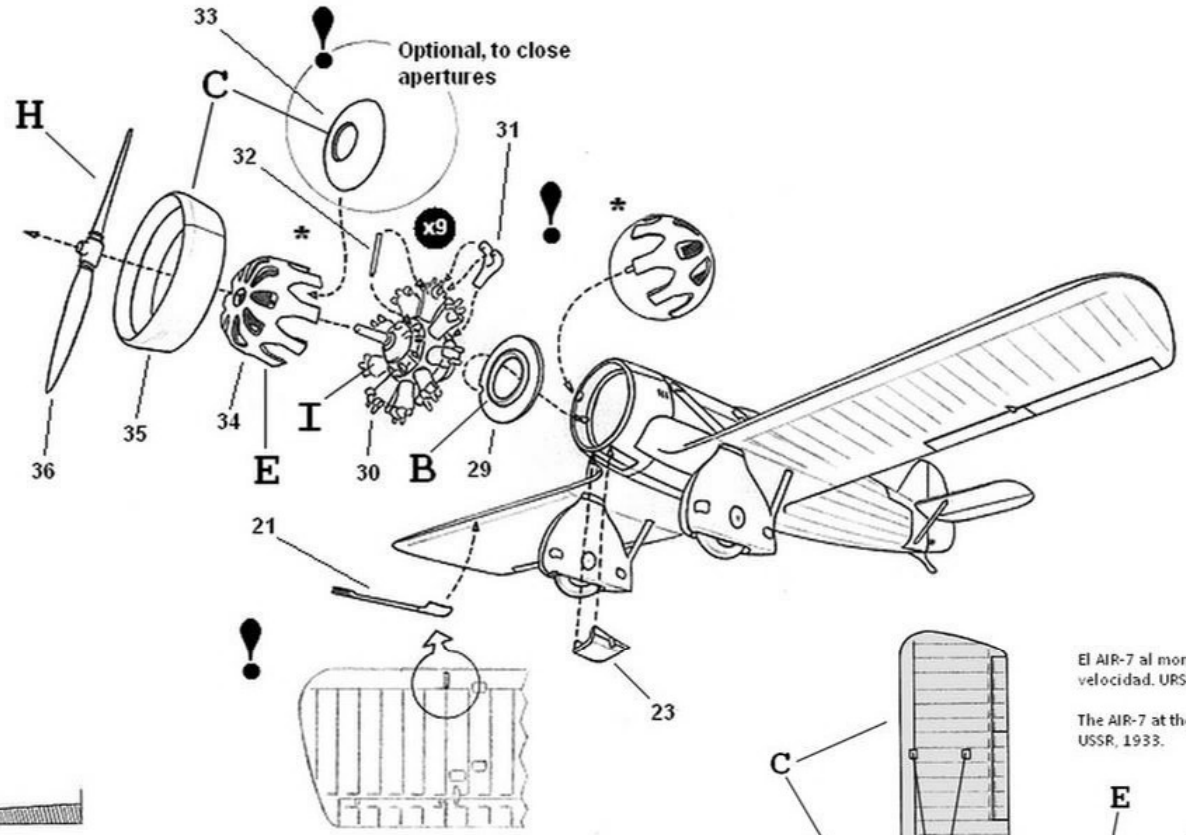

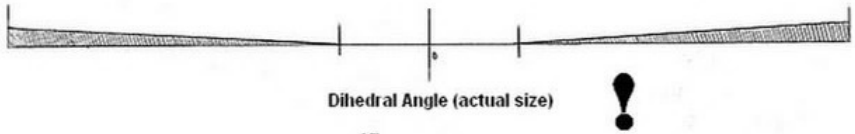

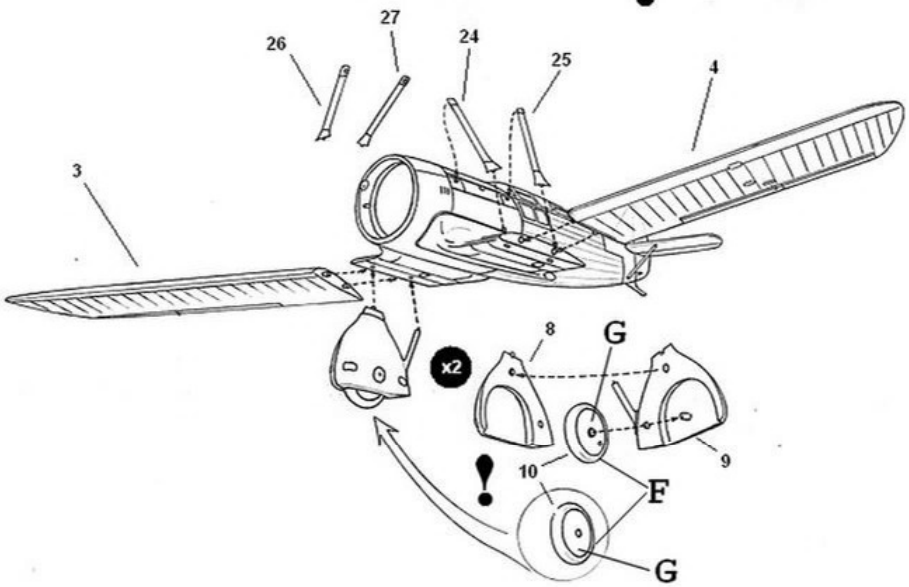

El AIR-7 al momento de su récord de velocidad. URSS, 1933.

The AIR-7 at the time of the speed record. USSR, 1933.