

= Ilyushin Il -6 =

The Ilyushin Il -6 was a Soviet long range bomber developed from the Ilyushin Il -4 during 1942 . Originally intended as a high speed replacement for the Il -4 , it was recast as a very long range bomber with fuel conserving diesel engines before production of the single prototype began in December 1942 . Flight testing showed controllability issues when landing at high weights and the engines proved to be hard to start at low temperatures and were slow to respond to throttle movements . Further development was canceled in 1944 .

= Development =

Outwardly similar to the Il -4 , the Il -6 was faster and had a longer and slimmer fuselage fitted with a completely new , highly tapered wing with an aspect ratio of 8 . The engine nacelles were streamlined to reduce drag and increase speed as the engine radiators were mounted in the wing center section , fed by slits in the leading edge of the wing . Defensive armament was greatly improved with five 20 mm (0.79 in) cannon fitted on flexible mountings in the nose , dorsal turret , two waist positions and a ventral blister forward of the tailplane .

The Il -6 was originally intended as a high speed replacement for the Il -4 . But after the initial design was completed in August 1942 , the VVS requested that the bomber have extended range instead of high speed . So the original M -71 radial engines were replaced by Charomskiy ACh -30 diesel engines with low fuel consumption which promised to give the Il -6 the required range , especially when operated at moderate weights . The revised design was completed in December 1942 and production of the prototype was initiated . First flight of the Il -6 was made in Irkutsk on 7 August 1943 with lower powered ACh -30B engines substituted for the unavailable ACh -30BF engines .

Flight tests revealed difficult handling , and a lack of power due to the non availability of the intended ACh -30BF engines . Flight tests continued without the waist guns and their gunner until the ACh -30BF 's were fitted between May and July 1944 . Despite modifications , the aircraft still suffered from poor controllability at low speeds and high weights as well as very poor gliding performance . Throughout the flight tests the engines performed satisfactorily in the air , but were found to be very difficult to start in low ambient temperatures and had slow response to throttle movements . Further development was canceled .

= Variants =

Il -6 ? intended production version with Charomskiy ACh -30BF engines (also known as M -30) .

Il -6 ? bomber with M -90 engines - projected variant with M -90 engines , production drawings were issued but nothing further was heard of it , presumably as all effort was focused on the diesel powered version .

= Specifications (Il -6) =

Data from Gordon , OKB Ilyushin : A History of the Design Bureau and its Aircraft .

General characteristics

Crew : 6

Length : 17.38 m (57 ft 0 in)

Wingspan : 26.07 m (85 ft 6 in)

Wing area : 84.8 m² (912 ft²)

Empty weight : 11,930 kg (26,301 lb)

Gross weight : 19,600 kg (43,220 lb)

Powerplant : 2 x Charomskiy ACh -30BF (M -30) , 1,417 kW (1,900 hp)
each each

Performance

Maximum speed : 464 km / h (288 mph)

Range : 5 @, @ 450 km (3 @, @ 387 miles)

Service ceiling : 7 @, @ 000 m (22 @, @ 970 ft)

Rate of climb : 2 @. @ 9 m / s (571 ft / min)

Armament

5 × 20 mm (0 @. @ 79 in) ShVAK Sh @-@ 20 cannon in a dorsal turret , and flexible mountings at the nose , beam and ventral positions .

2 @, @ 500 kg (5 @, @ 500 lb) of bombs , maximum , internally

2 × 1 @, @ 000 kg (2 @, @ 200 lb) bombs on external racks

or 2 × 1 @, @ 000 kg (2 @, @ 200 lb) torpedoes on external racks