

= Ilyushin Il -32 =

The Ilyushin Il -32 was a Soviet heavy military glider developed after World War II to deliver 70,000 kg ( 150,000 lb ) of cargo . To facilitate loading and unloading the glider 's nose and tail sections were hinged to swing sideways . The Il -32 required a four engine aircraft to tow it safely ; it was canceled when it became clear that no such tug was going to be available after the Tupolev Tu -75 and Ilyushin Il -18 programs were both canceled because of shortages of their intended Shvetsov ASh -73 engines .

= Development =

After the end of World War II the Soviets devoted a considerable amount of effort to developing heavy transport gliders to deliver troops during an airborne assault . As part of this effort the Council of Ministers ordered the Ilyushin design bureau on 20 September 1947 to begin work on a glider capable of carrying 70,000 kg ( 150,000 lb ) of cargo , including 60 troops or a 122 mm ( 4.8 in ) cannon with its prime mover , ammunition and crew . Its intended tug was the Tupolev Tu -75 , a four engine transport derived from the Tupolev Tu -4 .

The Il -32 was an aluminum bodied , high wing cantilever monoplane with a fixed tricycle undercarriage whose fuselage was square in cross section to fit as much cargo as possible . The two spar wings had a moderate aspect ratio . It was regarded as expendable and was built very simply to facilitate large scale manufacture . The nose and tail sections swung up to 95 ° to starboard to facilitate loading .

The Il -32 made its first flight on 20 August 1948 , towed by a twin engine Ilyushin Il -12 , but the Il -12 wasn 't powerful enough to tow a fully loaded glider and the four engine Il -18 airliner prototype was adapted to tow it from 20 September . During these flight tests it reached a cruising speed of 323 km / h ( 201 mph ) at an altitude of 3,000 metres ( 9,800 ft ) and a weight of 160,000 kg ( 350,000 lb ) . The flight tests were satisfactory and preparations were made to begin series production , but the lack of suitable tugs was a problem . None of the Soviet four engine aircraft that could be used were either in production or available . Both the Tupolev Tu -70 and Il -18 airliners had been canceled , as had the Tu -75 transport , and the Tu -4 was dedicated to the strategic bombing mission . Experiments were made with a pair of Il -12s towing the Il -32 , but this was both difficult and risky for all involved . The Il -32 was therefore canceled for lack of a proper tug .

= Specifications =

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

General characteristics

Capacity : 60 troops or 70,000 kg ( 150,000 lb ) of cargo

Length : 24.84 m ( 81 ft 6 in )

Wingspan : 35.8 m ( 117 ft 5 in )

Wing area : 159.5 m<sup>2</sup> ( 1716.84 ft<sup>2</sup> )

Empty weight : 9600 kg ( 21,164 lb )

Gross weight : 160,600 kg ( 360,597 lb ) each

Performance

Cruising speed : 327 km / h ( 203 mph )

Service ceiling : 4000 m ( 13,100 ft )