

Su-30K



The Su-30K Aircraft is a two-seat supersonic, multirole, all –weather fighter that is designated for day and night, all-weather defeat of air and ground targets at free-space and against the earth’s background, in active and passive jamming environment.

The Su-30K Aircraft is designed on the basis of Su-27UB Aircraft version.

However Su-30K Aircraft has the following advantages in comparison with Su-27UB Aircraft:

- The airframe of Su-30K Aircraft is improved for provision of long flights with day and night in-flight refueling capability. Considering the physiological capabilities of the crew, time in the air for the aircraft is limited with 10 hours;
- The cockpit direct-forward visibility is improved due to relocation of infrared search and track unit to the right;
- Second cockpit controllers are changed in order to provide equivalence of usage of aircraft combat capabilities from both cockpits;
- The airframe design is strengthened, sturdy units and undercarriage legs are installed in order to increase maximum payload;
- Aircraft systems (armament control system, remote control system, etc.) are upgraded with the purpose of increase of operational reliability and combat effectiveness;
- Service life rates of the aircraft and the engines are increased.

Major Performance Characteristics of the Aircraft

Weight characteristics, kg

- Normal takeoff weight (2×P-27P+2×P-73, 5270 kg of fuel, cartridges, oxygen, cooling liquids and etc. 24780
- Maximum takeoff weight..... 33000
- Landing weight, permissible maximum, kg..... 21000
- Fuel load (fuel specific gravity $\gamma=0,785 \text{ gr/cm}^3$), kg
- Normal..... 5270
- Maximum 9400
- Maximum payload weight, kg 8000

Maximum speed, kmh

- Near the ground..... 1400
- Maximum M number..... 2,0

Minimum indicated airspeed of a horizontal flight, kmh

- At an altitude of less than 6 km..... 200
- At an altitude from 6km to 15 km..... 300
- At an altitude of more than 15 km 400

Operating ceiling, km 17,5

Major Performance Characteristics of the Aircraft

Maximum flight range with maximum fuel load (2×P-27P + 2×P-73)

- Near the ground, km..... 1270
- At an altitude, km (with 970 kg fuel remainder) 3000
- With one refueling, km 5200
- With double refueling, km..... 8400

Duration of combat tasks execution

(in accordance with crew capabilities), hours..... 10

Limit load factor, units..... 8.5

Minimum steady turn radius

(at the altitude of 500 m), m..... 480

Maximum climbing capacity, m/sec 270

Acceleration time (at the altitude of 1000 m), sec

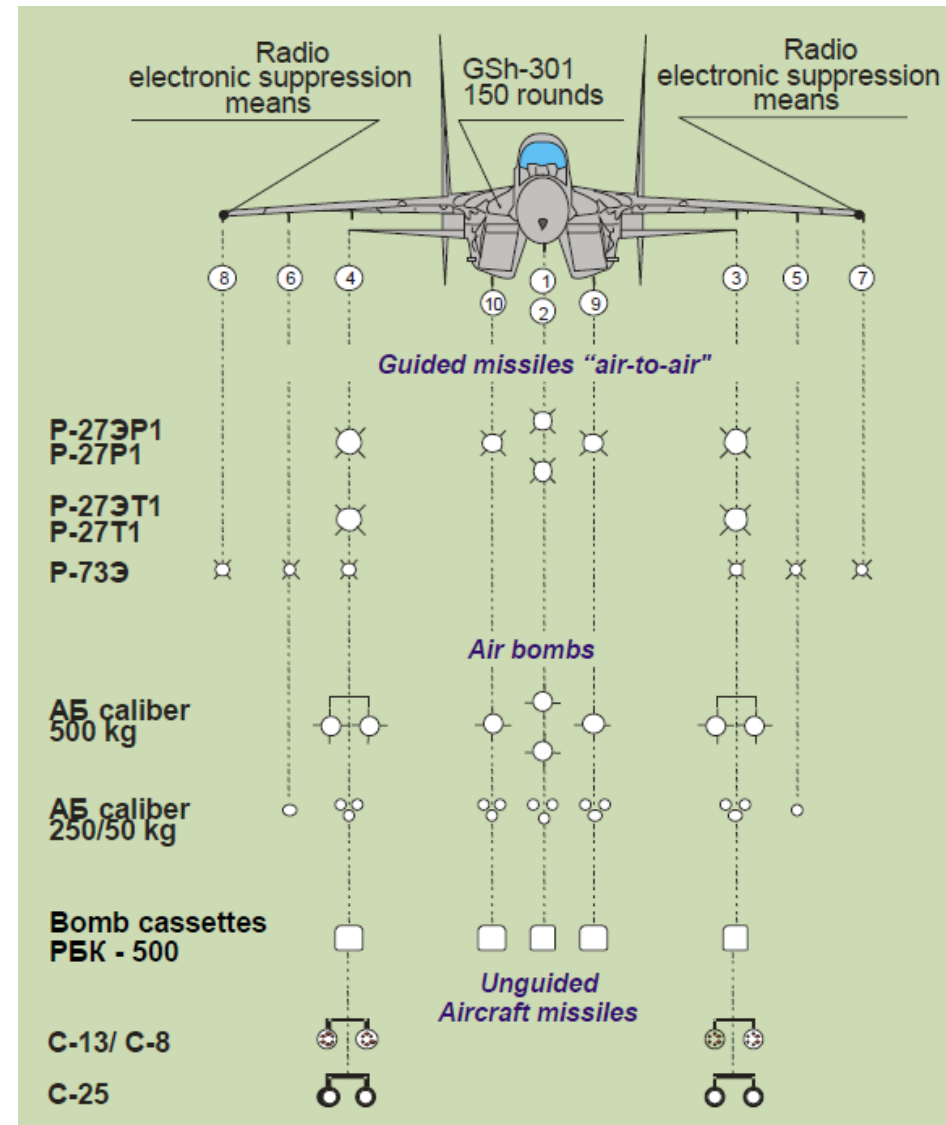
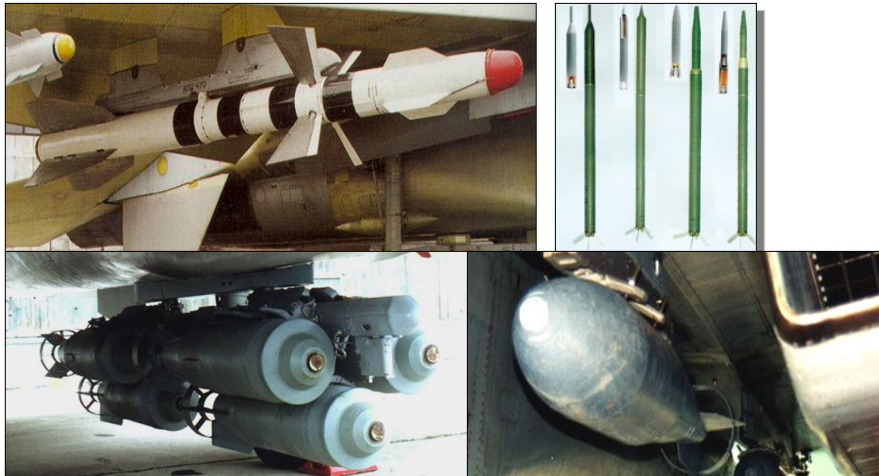
- from 600 kmh to 1100 kmh..... 17,2
- from 1100 kmh to 1300 kmh.....16,0

Main geometric data, m

- length 21,9
- span 14,7
- altitude 6,38

Armament:

- 30 mm GSh-301 cannon mounting;
- “Air-to-Air” middle range guided missiles R-27R(ER), R-27T(ET);
- “Air-to-Air” small range guided missiles R-73;
- Unguided projectiles of S-8, S-13, S-25 type;
- Ballistic bombs of caliber 50,100, 250, 500 kg;
- One-time cluster bomb unit RBK-500.



Service life rate

Aircraft

- Assigned life, h 3000
- Service life, years..... 30
- Durability until second overhaul, hours.....1000
- Service life until the second overhaul, years.....10

AL-31F Engine

- Assigned life, h 2000
- Time between overhaul, h 500

