

YJ-91 [Kh-31P, ARM]

Guided Weapon

Type: Guided Weapon

Weight: 600.0 kg

Length: 4.7 m

Span: 0.914 m

Length: 4.7 m

Diameter: 0.36

Generation: None



Properties: ARM Target Memory, Bearing-Only Launch (BOL)

Targets: Radar

Sensors / EW:

- Passive Radar Seeker - (AS-17 ARM) ESM, Weapon Seeker, Anti-Radiation, Max range: 203.7 km

Weapons / Loadouts:

- YJ-91 [Kh-31P, ARM] - Guided Weapon. Surface Max: 120 km. Land Max: 120 km.

New air defense weapon systems of the American Patriot kind have raised the requirements which antiradar missiles must meet. These include first of all higher speed and longer range, then also high interference immunity and radar turn-off when attacked.

For the special purpose of meeting these requirements, the "Zvezda" group under the direction of V. Bugayskiy began in 1977 working on the Kh-31 missile (Article) 77P). The first launchings of this missile took place in 1982.

The most interesting component of the Kh-31P is its dual propulsion system designed by the "Soyuz" Design Bureau in Turayev near Moscow (note: there are several "Soyuz" engineering groups in Russia). First the missile is accelerated by its solid-fuel rocket engine to a speed of Mach 1.8, then the engine is discarded and the interior of the missile is converted into the combustion chamber of the missile's jet engine. The latter accelerates the missile to a speed of almost Mach 4.5, while four air intake holes on the sides of the missile body open up. On the basis of the Kh-31P antiradar missile were developed the Kh-31A missile (Article 77A) with an active-radar guidance head and also an M-31 flying target for air defense training exercises. The Kh-31 was for the first time publicly displayed in November 1991, in Dubai (United Arab Emirates).

The State Scientific Production Center Zvezda-Strela has upgraded the air-to-surface supersonic ASM Kh-31A NATO: AS-17 Krypton).

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