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US AIR-TO-AIR MISSILE MARKINGS AIM-9B/D/G/J/L/M AIM-7E-2/M

These decals are sized for the Hasegawa Weapons sets and typical missiles that come in Hasegawa kits.

With some adjustments, these decals are compatible with other manufacturers kits.



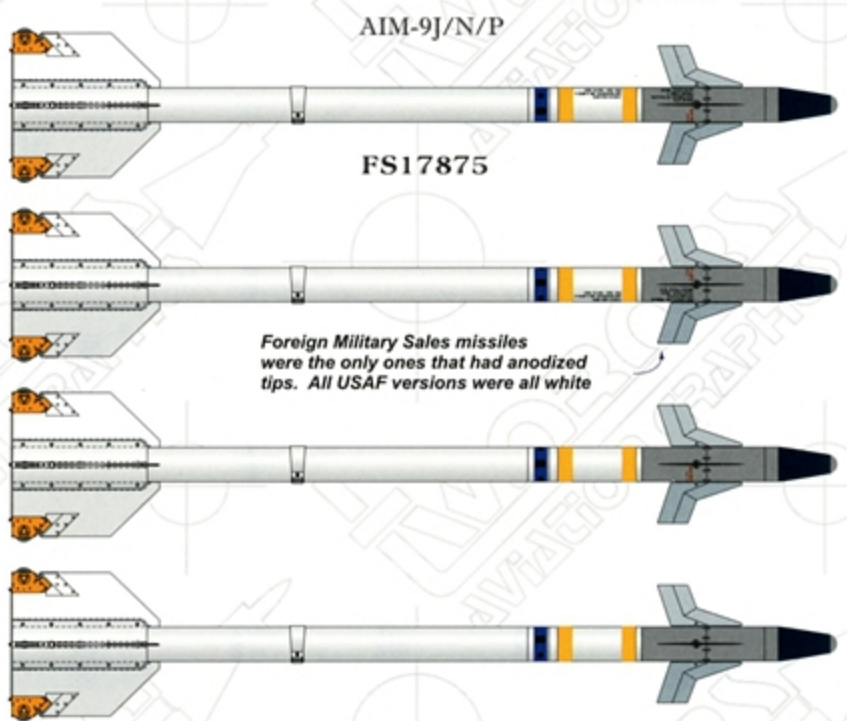
AIM-9B/E

FS17875

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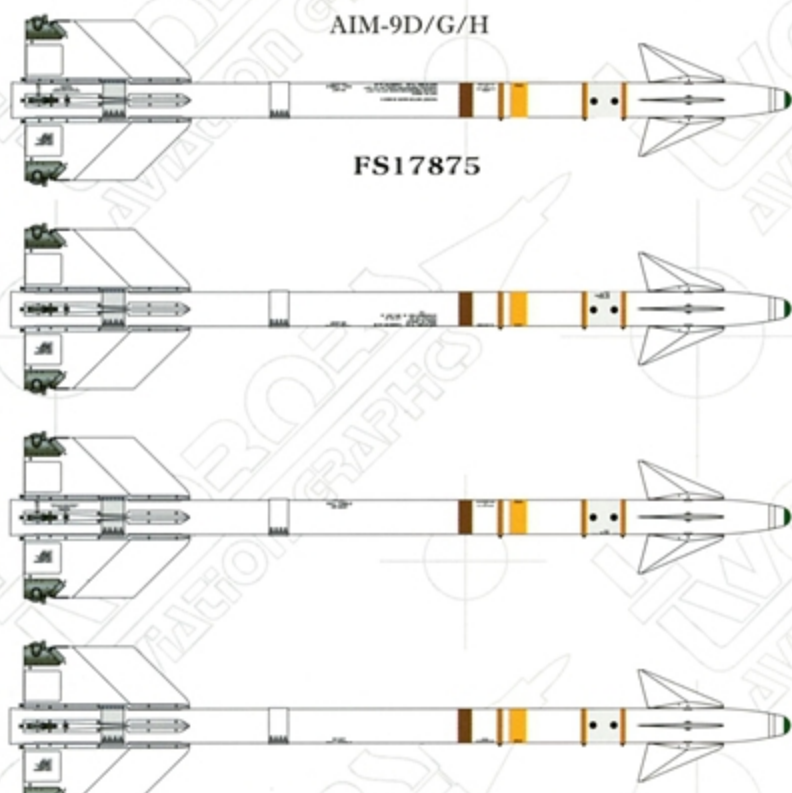
AIM-9J/N/P

FS17875

Foreign Military Sales missiles were the only ones that had anodized tips. All USAF versions were all white.

The AAM-N-7-A was introduced in 1957 and remained in service through the early years of the Vietnam War as the AIM-9B. USAF F-4s began carrying the AIM-9E in 1969 and it was the primary version used during the 1972 Linebacker bombing raids against North Vietnam.

The decal markings for the AIM-9B can also be used on the E version. The AIM-9J began flying on MIGCAP missions over North Vietnam in August 1972. Introduced in 1976, the AIM-9J-1R was somewhat shorter than the AIM-9J-1 because of internal changes. This version had an improved laser fuse and its unpainted seeker and canards could identify it as an AIM-9P-4 of P-5 model.



AIM-9D/G/H

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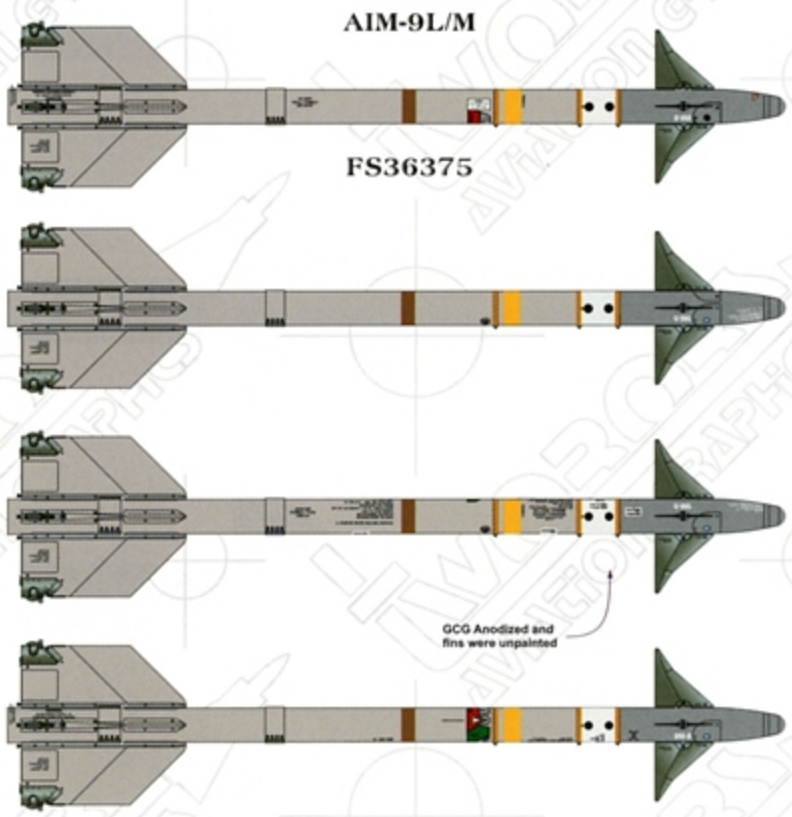
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The AIM-9D Infrared Alternative Head (IRAH) entered service at the same time as the AIM-9C to replace the AIM-9B. Only very early AIM-9Ds had white noses. AIM-9Ds scored over 20 kills in Vietnam during the Operation Rolling Thunder bombing of Vietnam.

The AIM-9G differed from the AIM-9D only by the addition of the Sidewinder Expanded Acquisition Mode (SEAM) and was used during the 1972 Linebacker bombing raids. The AIM-9H is the solid state electronics version of the the AIM-9G.



AIM-9L/M

FS36375

GCG Anodized and fins were unpainted

All USN/USMC and USAF AIM-9L/Ms are identical except for their cooling systems; the USAF missiles use argon in internal bottles. The AIM-9M features significantly improved counter-countermeasures. The AIM-9S is a less capable export version of the AIM-9M.

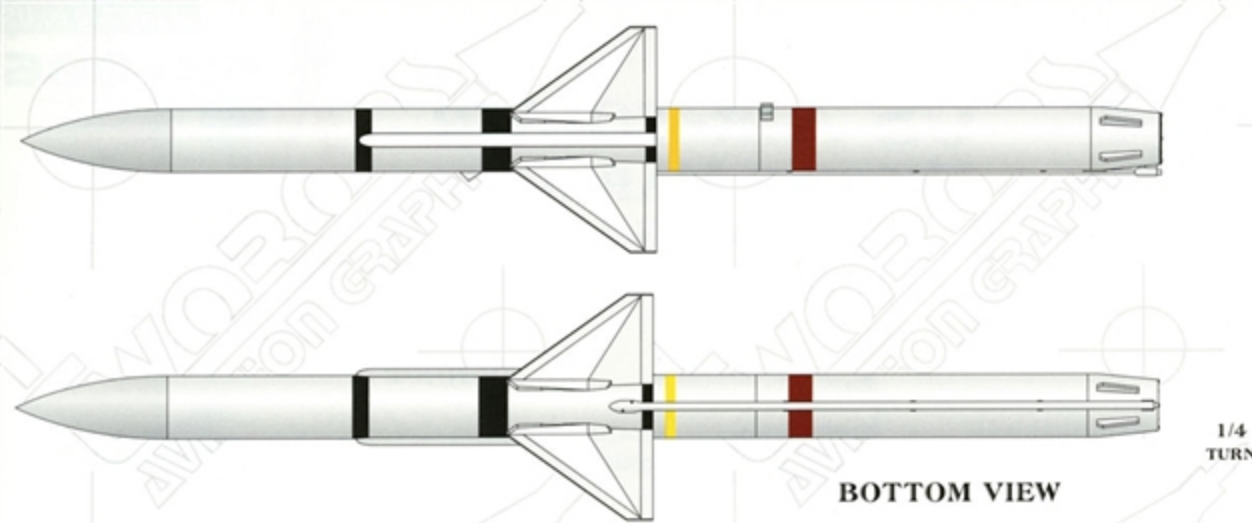
ALL ARTWORK AND TECHNICAL INFORMATION
COURTESY OF JIM ROTRAMEL.

AIM-7E SPARROW III

In 1963, production started on the AIM-7E version of the Sparrow. It used a new propulsion system, a solid-fueled rocket by Rocketdyne (either a Mk 38 or later a Mk 52). The new motor significantly increased range and performance of the missile. Effective range of course depended greatly on firing parameters like launch speed and relative velocity of the target. In head-on attacks under optimal conditions, it could be as high as 35 km (20 nm), while in stern attacks, maximum effective range was more around 5.5 km (3 nm).

About 7500 AIM-7D and 25000 AIM-7E missiles were built, and the Sparrow was used heavily in Vietnam by the USAF and the U.S. Navy. The first combat kill was scored on 7 June 1965, when USN F-4B Phantoms shot down 2 MiG-17s. However, the initial combat results were very disappointing. The potentially long range of the AIM-7 could not be used, because unreliable IFF capabilities of the time effectively required visual identification of all targets. Coupled with the high minimum range of the missile of 1500 m (5000 ft) and poor performance against maneuvering and/or low-flying targets, this led to a kill probability of less than 10%. Therefore, the improved AIM-7E-2 was introduced in 1969 as a "dogfight missile". It had a shorter minimum range, clipped wings (note drawing) for higher maneuverability, and improved autopilot and fuzing. The AIM-7E-3 had further improved fuzing and higher reliability, and the AIM-7E-4 was specially adapted for use with high-power fighter radars (like the F-14's AN/AWG-9). Despite all problems, more than 50 aircraft were shot down by Sparrow missiles during the Vietnam air war.

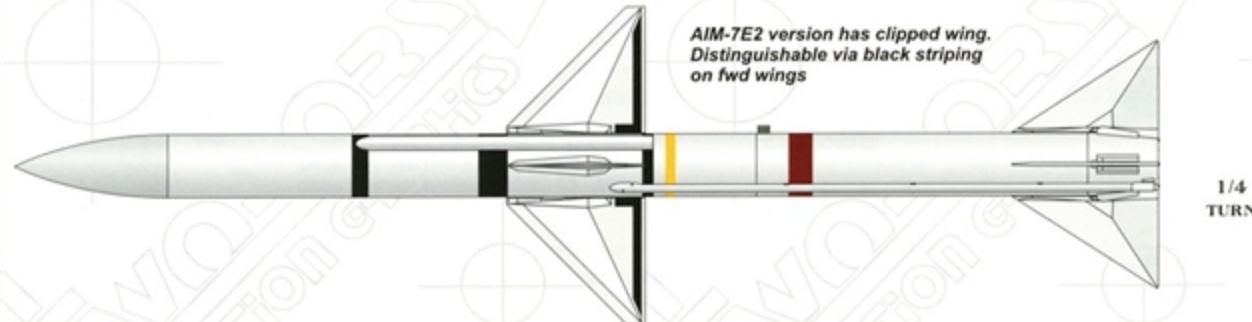
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BOTTOM VIEW

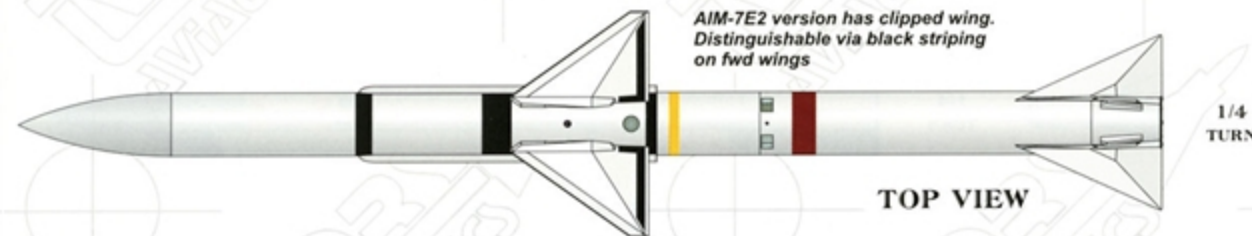
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AIM-7E2 version has clipped wing.
Distinguishable via black striping
on fwd wings



1/4
TURN

AIM-7E2 version has clipped wing.
Distinguishable via black striping
on fwd wings



TOP VIEW

1/4
TURN

AIM-7M SPARROW III

The next major version of the AIM-7 was the AIM-7M, whose main new feature was the new inverse monopulse seeker for look-down/shoot-down capability in a new WGU-6/B (later WGU-23/B) guidance section. There is no evidence of any Sparrow variants officially designated -7J/K/L (although the designation AIM-7J is sometimes associated with the AIM-7E license-built in Japan). Sources say that the suffix "M" was deliberately chosen to mean "monopulse", suggesting that suffixes J/K/L were indeed skipped. The monopulse seeker improves missile performance in low-altitude and ECM environments. Other new features of the AIM-7M are a digital computer (with software in EEPROM modules reprogrammable on the ground), an autopilot, and an active fuze. The autopilot enables the AIM-7M to fly optimized trajectories, with target illumination necessary only for mid-course and terminal guidance. The AIM-7M also has a new WDU-27/B blast-fragmentation warhead in a WAU-17/B warhead section. The first firing of a YAIM-7M occurred in 1980, and the AIM-7M entered production in 1982.

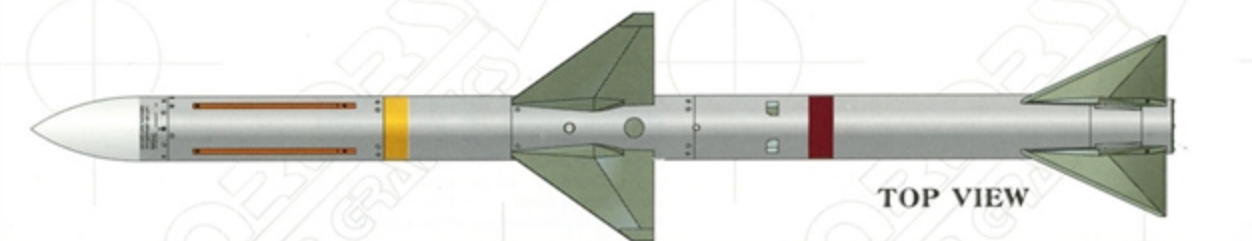
The AIM-7P is an improved AIM-7M, and AIM-7P missiles are built since 1987 by new production as well as conversion of existing AIM-7Ms. The AIM-7P features improved guidance electronics and on-board computer, has a new radar fuze, and has an uplink to the autopilot for mid-course guidance updates. The AIM-7P improves Sparrow performance especially against small and/or low-flying targets. There are two subvariants of the AIM-7P, known as Block I and Block II. The AIM-7P Block I has a WGU-6D/B guidance section, and the Block II uses a WGU-23D/B guidance section and also features a new rear receiver. The combat record of recent Sparrow missiles (AIM-7M/P) is much better than that of the AIM-7D/E of the Vietnam era. In Operation Desert Storm, 26 Iraqi aircraft were shot down with AIM-7 missiles, with 71 AIM-7s fired (a hit rate of 37%).

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BOTTOM VIEW

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TOP VIEW

1/4
TURN