

INSTRUCTIONS
說明書

LAU-3 Rocket Pod

LAU-3火箭發射巢

The LAU-3 rocket pod held 19 2.75" FFAR (Folding Fin Aircraft Rocket). The rockets could have different types of warheads. HE (high explosive) rockets were used against "soft" targets such as soft skinned vehicles or personnel. HEAT (high explosive anti-tank) heads had a shape charge and were used against armored vehicles. The LAU-3 pod was reusable and was returned with the aircraft for reloading and could be used on most aircraft and helicopters.

LAU-3火箭發射巢用於攻擊敵方人員、裝甲車、運兵車、坦克等載具，可根據攻擊的目標不同而選擇不同種類的彈頭以達到最有效的攻擊效果。並且火箭巢可以重複使用，火箭發射巢大量裝備於武裝直升機、攻擊機和戰鬥機上，是攻擊地面目標的常用武器（模型套件中提供2種彈頭選擇單獨安裝的彈頭）

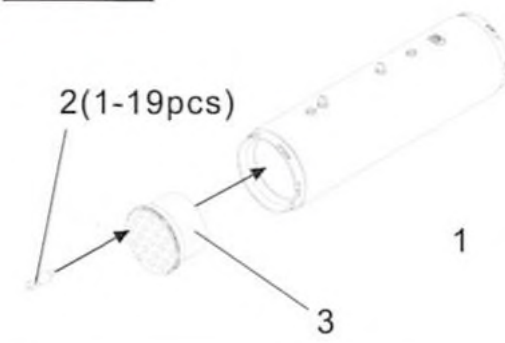
LAU-68D/A Rocket Launcher

LAU-68D/A 火箭發射巢

These rocket launchers can be fired in single (one at a time) or ripple (one after the other in multiple shots) modes. The 2.75" rocket launchers are a cylindrical construction of seven aluminum launch tubes. These launch tubes are held together with metal ribs and are covered by an aluminum skin. The current 2.75" rockets are known as Hydra 70 rocket system, and use the Mk.66 rocket motor. The three fins are of the wrap-around type, and fit around the circumference of the rocket nozzle. Mk.66 is sometimes called a WAFAR (Wrap-Around Fin Aerial Rocket) instead of an FFAR (as in the LAU-3).

LAU-68火箭發射器，該發射器是L-3公司設計的先進遙控武器站(Advanced Remote Weapon Station)的一部分，可用螺絲固定在艦船甲板上，並可配備多種目標定位傳感器。用於攻擊敵方人員，以及裝甲車、運兵車、坦克等載具。可根據攻擊的目標不同而選擇不同種類的彈頭以達到最有效的攻擊效果。並且火箭巢可以重複使用。火箭發射巢大量裝備於武裝直升機、攻擊機和戰鬥機上。是攻擊地面目標的常用武器（模型套件中提供2種彈頭選擇單獨/一體安裝的彈頭）

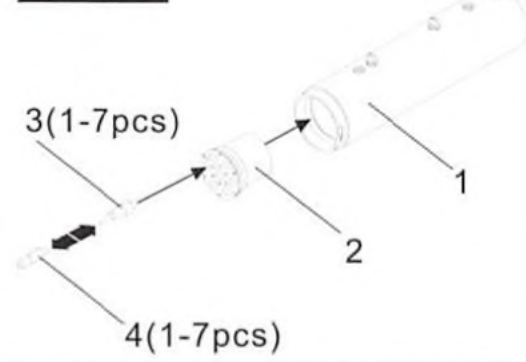
ZA 01



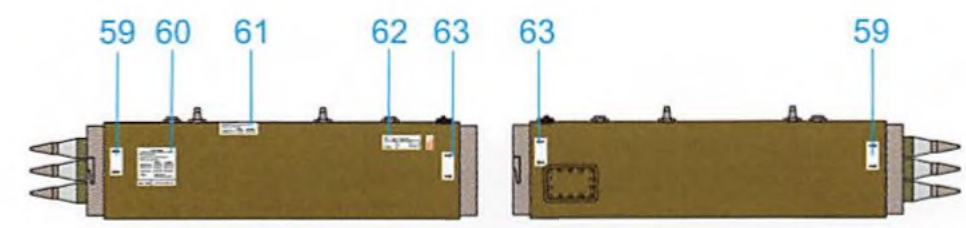
FS 34087 Aluminium



ZA 03



FS 34087 Aluminium



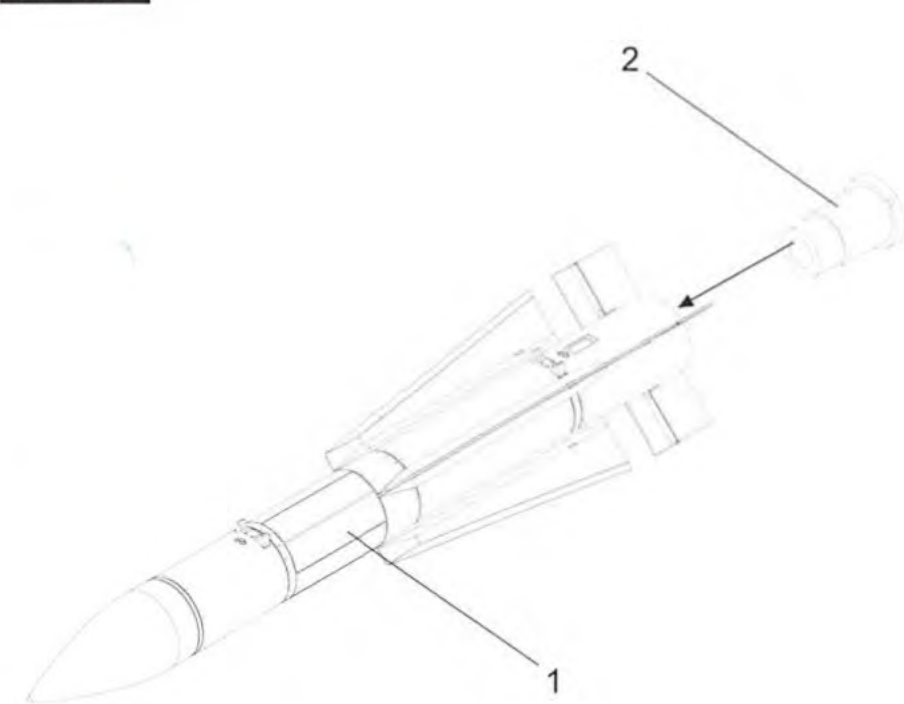
AIM-54C+ Phoenix

AIM-54C 不死鳥導彈

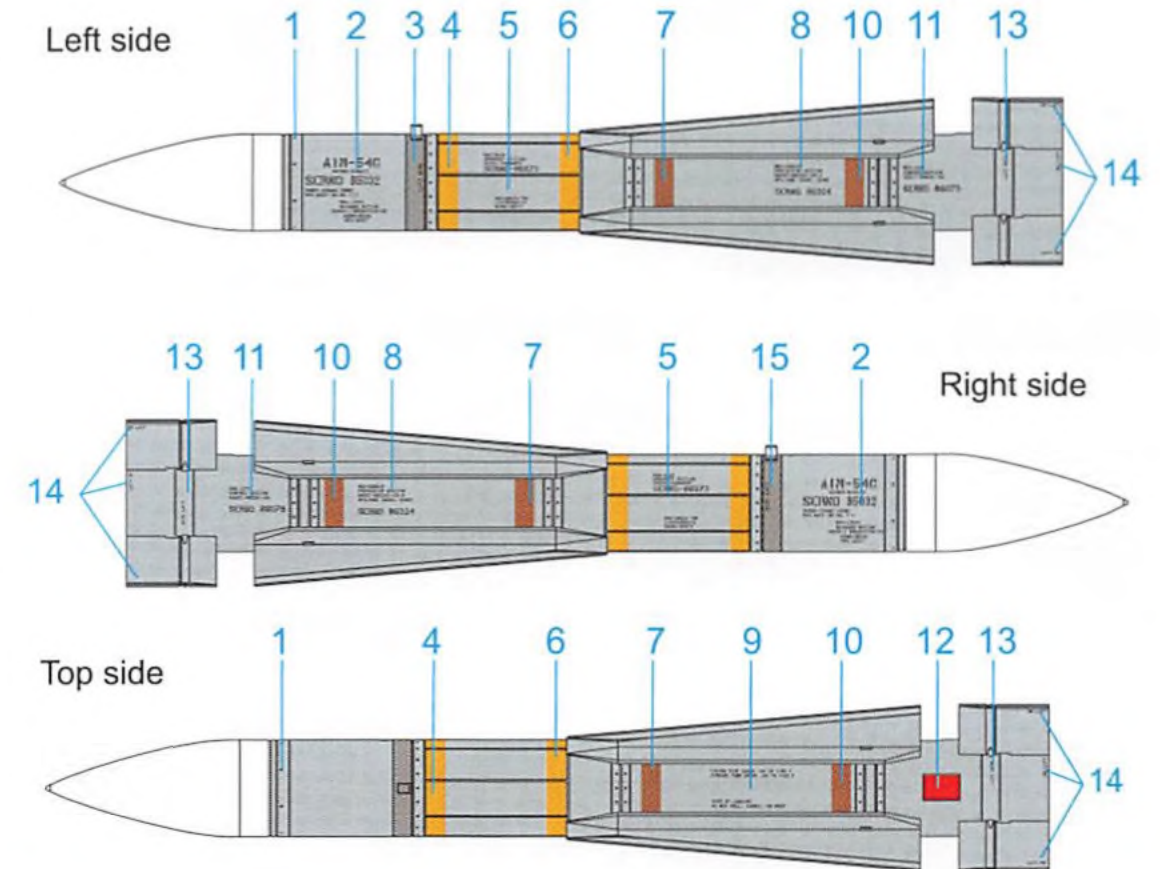
Originally called the AIM-54C ECCM/Sealed, the "C+" could operate at higher temperatures in captive flight. Although it was theoretically possible to use this missile with the F-14A and B, in practice the AIM-54C+ was used exclusively by the F-14D (which could only use the "C+"). Consisting of two parts, our kit is slide molded for ease of clean up and painting.

"不死鳥"導彈的第三種也是最後一種型號是AIM-54C，AIM-54C導彈增強了電子對抗能力。並增強導彈跟蹤巡邏導彈這類的低空小型目標的能力，AIM-54C在1982年投產，1986年進入美國海軍服役，於2004年9月30日正式從美國海軍武器庫中退役。該導彈用於裝備F-14D戰鬥機，是雄貓最重要的武器之一。（套件提供的不死鳥導彈為一體成型，彈翼較薄更好的還原了實物）

ZA 08



FS 36375 FS 17875



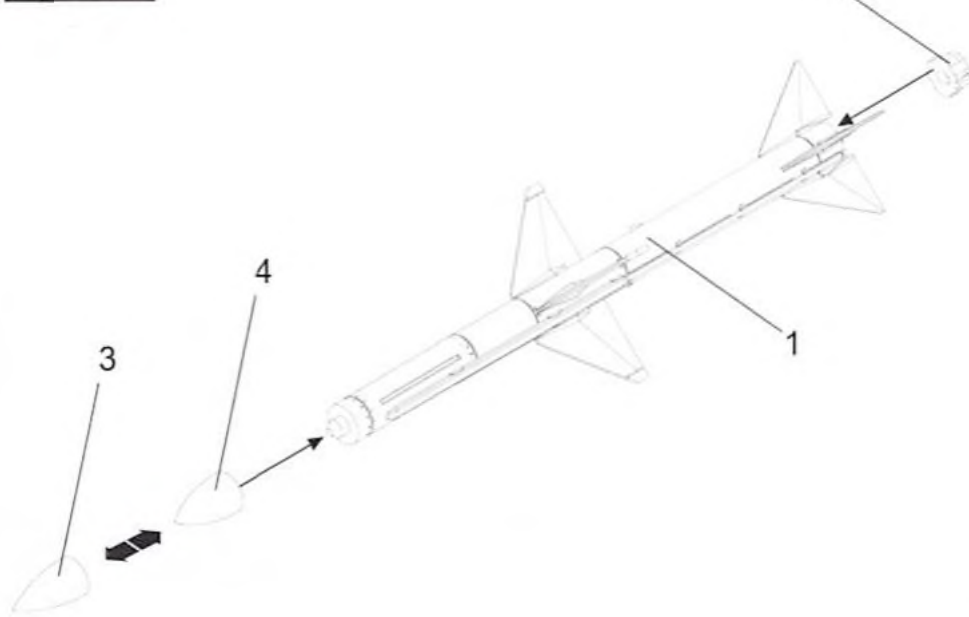
AIM-7M/P Sparrow

AIM-7M/P 麻雀導彈

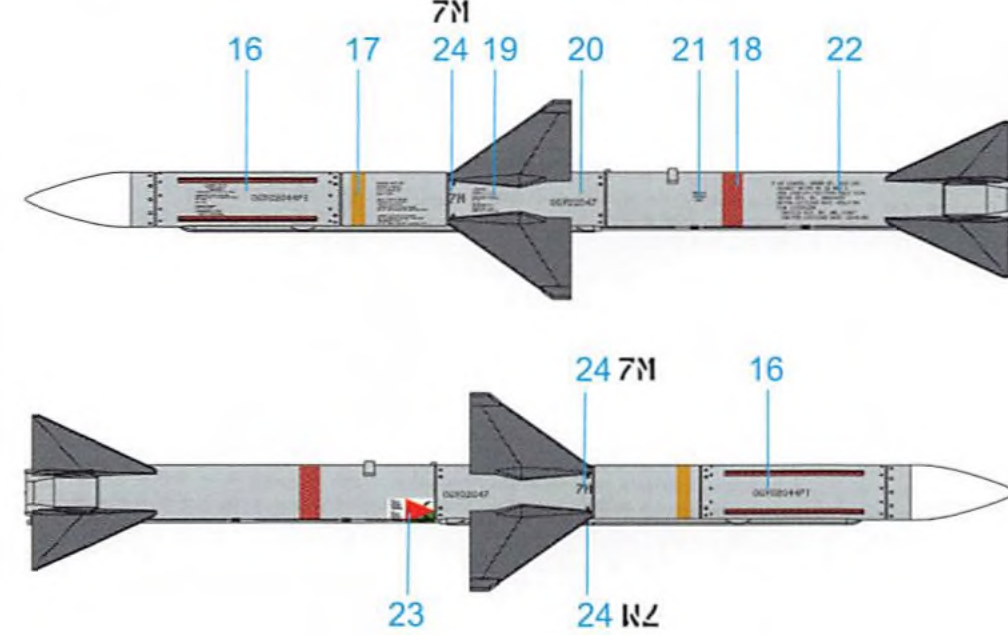
The AIM-7M was designed to provide enhanced capability against low altitude targets in an electronic jamming environment. The earlier AIM-7F (introduced in 1977) and AIM-7M (introduced in 1982) were externally distinguishable by their Target Detecting Devices (TDD). The AIM-7F had two, located on the sides of the missile, while the AIM-7M had four, located in line with the wings. Early AIM-7F used the pointed radomes until the "blunter" Von Karman radome (check references) was introduced late in its production run and used by all AIM-7M/Ps. We have provided both types of radome.

AIM-7 "麻雀"空空導彈是美國研製的一種中程雷達半主動制導空空導彈，該型導彈曾經在美國空軍、海軍、海軍陸戰隊航空兵中廣泛裝備，同時也作為外銷武器被多個北約盟國空軍/海軍航空兵採用。從20世紀50年代末到90年代，"麻雀"導彈及其後來的各種改進型號長期作為西方盟國主力超視距空戰兵器並在戰爭中廣泛使用（彈體採用一體成型，並且提供實彈/訓練彈兩種彈頭供玩家選擇）

ZA 09



FS 36375 FS 17875 Stainless



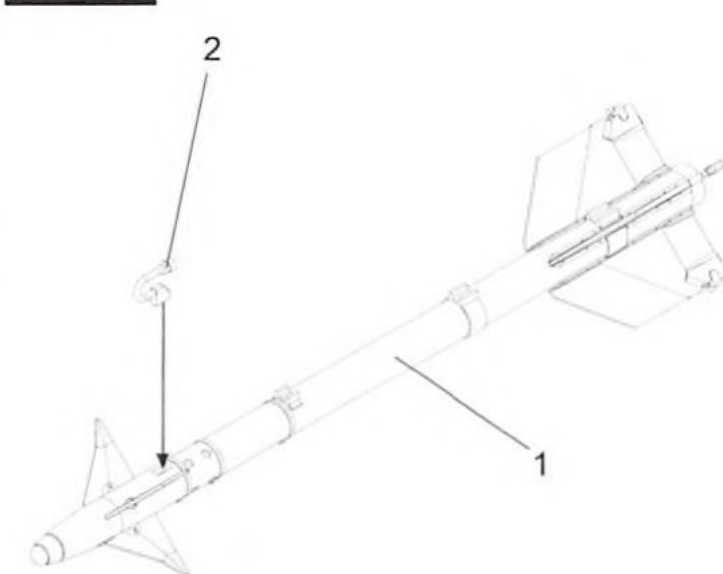
AIM-9L/M Sidewinder

AIM-9L/M 响尾蛇導彈

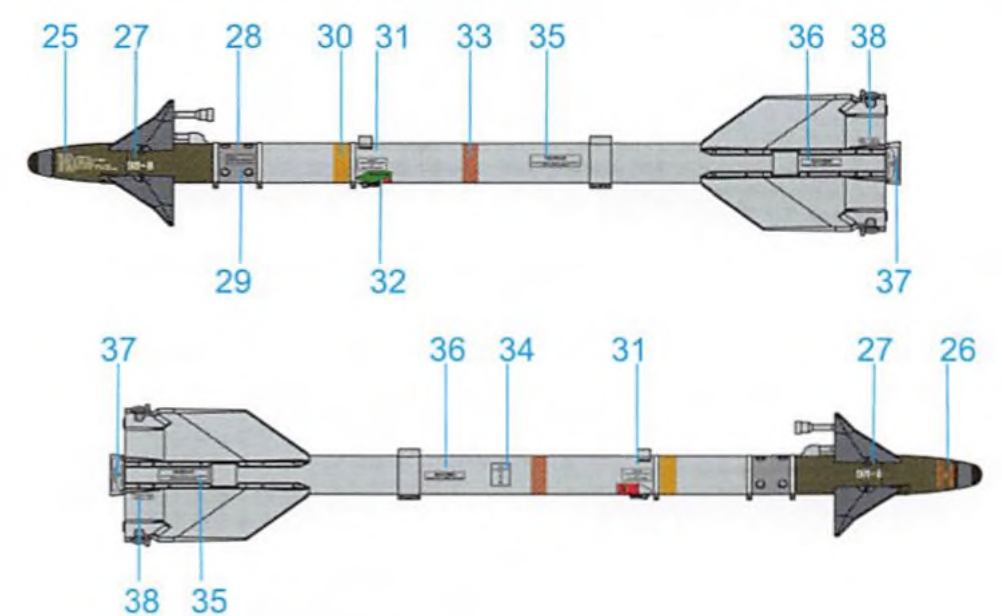
Initial work on what would become the externally identical AIM-9M began in 1974. The program was formally initiated with award of a development contract March 1976 for the AIM-9L product improvement program (PIP). The first missile was fired in February 1978 and the AIM-9M designation was assigned on 2 March 1978. Further improvements were indicated by 'dash' numbers, and the ultimate variant was the AIM-9M-10 with captive trainers reaching CATM-9M-34!

AIM-9L/M響尾蛇導彈是一種以紅外制導為制導方式的近距離格鬥導彈，是美軍現代作戰中通用範圍最廣的近距離格鬥導彈種類。AIM-9空空導彈主要有AIM-9C、9D、9G、9H、9E、9J、9N、9P、9L、9M、9X等10多個型號，性能不斷提高，已發展到第四代AIM-9X（套件中包含一條導彈數據纜線）

ZA 10



FS 36375 FS 34102 FS 17875 Stainless



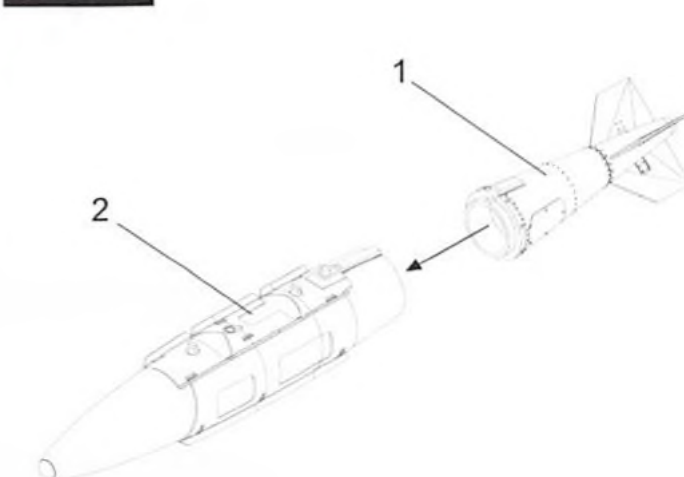
GBU-31 JDAM

GBU-31 JDAM 聯合制導攻擊武器

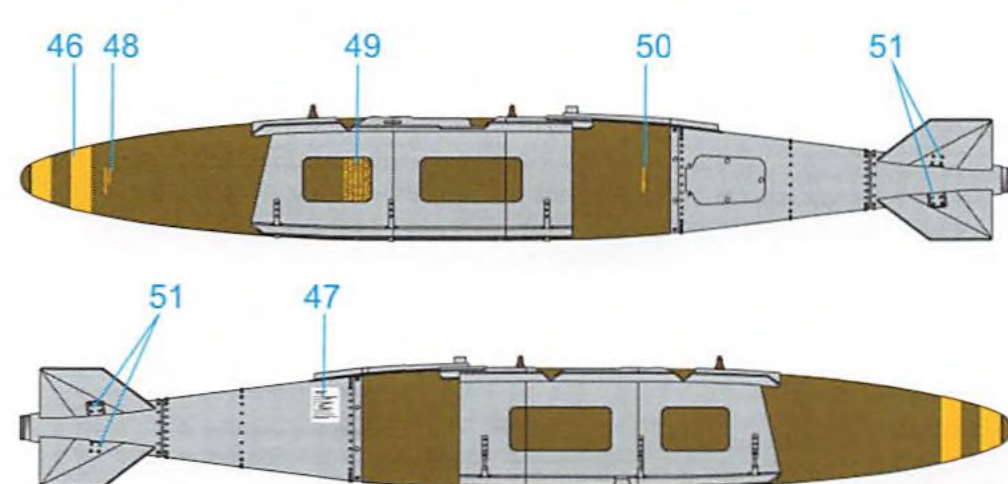
JDAM (Joint Direct Attack Munition) add-on kits exist for a variety of bombs, including the 2,000lb Mk.84 GP bomb (and the externally identical BLU-117, 119 & 121), and BLU-109 improved 2,000-lb penetration warhead. The main part of a JDAM add-on kit is the guidance and control section, which is mounted to the tail of the bomb body. This section houses the INS unit, the GPS receiver, the control electronics, and cruciform tailfins (three moving, one fixed) to steer the bomb. Additionally, strakes are fitted to the bomb body to enhance its stability and gliding capability.

傑達姆-聯合制導攻擊武器是為適應美國空軍和海軍發展要求而研製的，是一種由用美軍現存的普通常規炸彈升級發展而來，利用全球衛星定位系統(GPS)引導的全天候、自動尋地常規炸彈。制導炸彈以其殺傷力大、目標範圍廣和戰術使用靈活、經濟可承受性好等優勢，已經成為國外精確制導武器發展重點，是現代戰爭中空對地攻擊的主要武器。該模型套件提供的是 GBU-31傑達姆炸彈 重量900公斤（套件提供前後兩段式模塊 方便上色安裝）

ZA 11



FS 34087 FS 36375



GBU-16 Paveway II
GBU-16 寶石路II激光制導炸彈

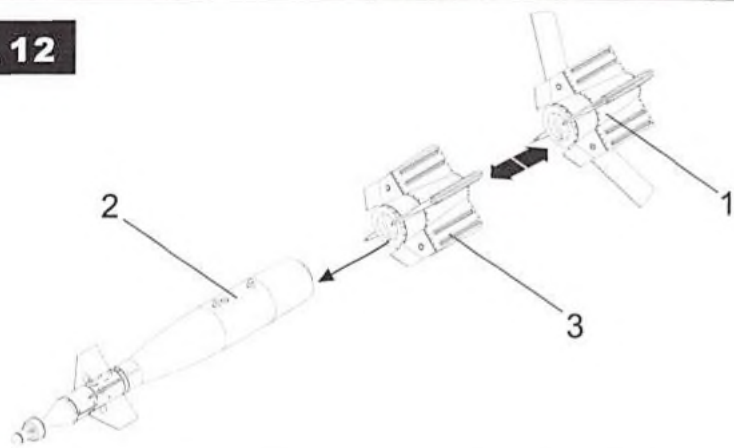
The GBU-16 Paveway II is a laser-guided bomb based on the Mk.83 1,000lb general-purpose bomb, but with added laser seeker added to the nose section and "wings" added to a tail unit for steering and guidance. It was introduced into service around 1976. It is used by USAF, US Navy, US Marine Corps, and various NATO air forces.
For modelers, the Paveway II bomb has white packing material in the nose section which keeps the designator facing forward, horizontal and protected. When removed the nose droops towards the floor. This is something usually missed on models.

GBU-12 Paveway II
GBU-12 寶石路II激光制導炸彈

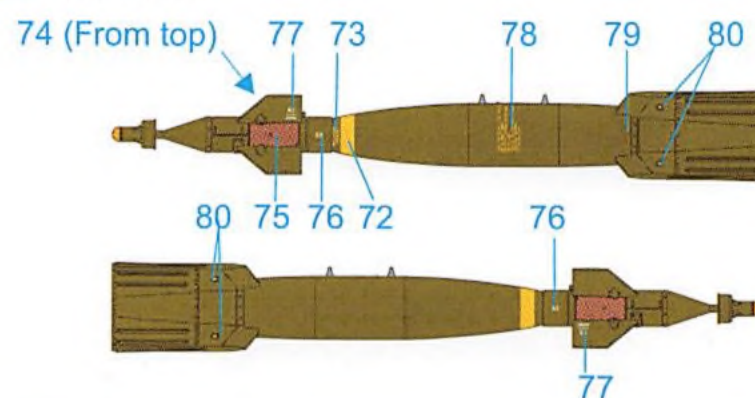
Based this time on the Mk.82 500-lb general-purpose bomb entered into service c. 1976. Paveway II laser-guided bombs use what is known as "bang bang" guidance. This means the bomb's fins deflect fully, rather than proportionally when it is attempting to guide to the laser spot. We have supplied these fins open so you can show the weapon dropped and in flight. If not then you can remove the fins and add these to other aircraft as you decide.

寶石路激光制導炸彈是美國于 60 年代中期, MK80 在系列標準炸彈基礎上加裝激光制導系統和彈翼而發展成的一種精確對地打擊武器, 至今已發展了三代。目前已經形成系列化裝備, 甚至有美軍用激光制導武器擊落敵軍直升機的記錄! 制導炸彈是美國空軍精確對地攻擊的重要力量。與"寶石路"相比, "寶石路 II" 尾翼換成了摺疊型, 這種尾翼兼顧了"寶石路 I" 彈翼組"長翼"和"短翼"的優點; 更高的飛行速度和更長的投擲距離。其同時在地面操作上更為簡易, 存儲運輸更為緊湊。(模型套件提供收起尾翼/打開尾翼兩種狀態, 為玩家提供製作投擲場景的更多選擇)

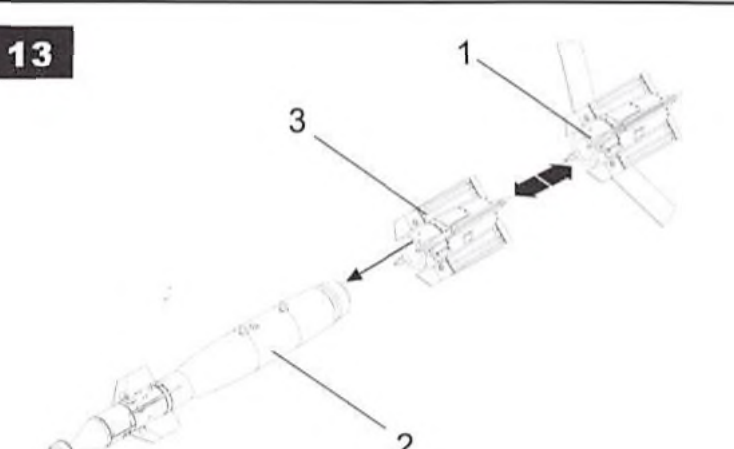
ZA 12



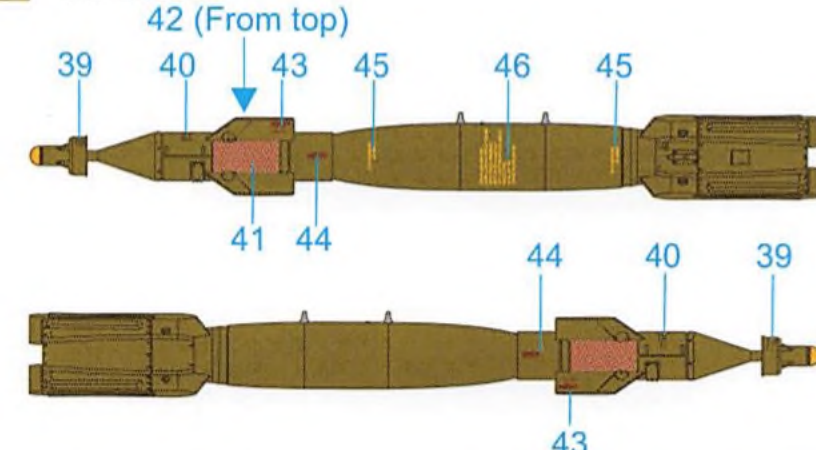
FS 34087



ZA 13



FS 34087

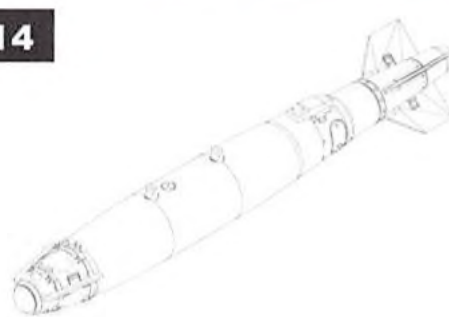


GBU-38(V)-1 USAF JDAM
GBU-38 制導炸彈

The 500lb GBU-38(V)1 is the USAF variant of this Joint Direct Attack Munition (JDAM) using the Mk.82 warhead. JDAMs enable the deployment of accurate air-to-surface weapons against high priority fixed and relocatable targets from fighter and bomber aircraft. Guidance is facilitated through a tail control system and a GPS-aided INS. The navigation system is initialized by transfer alignment from the aircraft that provides position and velocity vectors from the aircraft systems.

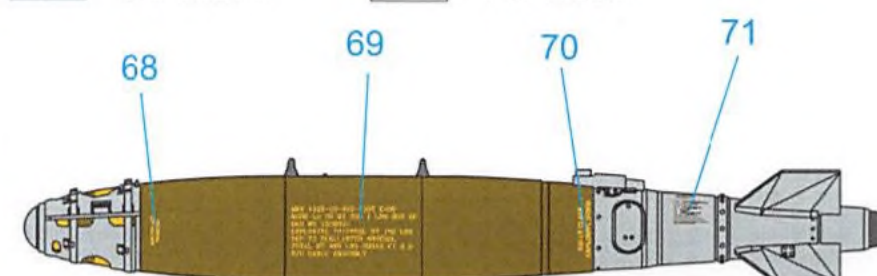
聯合直接攻擊彈藥 GBU-38 制導炸彈只有 227 公斤重, 該彈具有與 908 公斤的 GBU-31 "聯合直接攻擊彈藥" 的命中精度, 但造成的附帶損傷很小。GBU-38 可以廣泛使用于三軍航空兵作戰飛機, 包括遠程轟炸機、戰鬥機和武裝直升機等 (套件提供完整的一體成型彈藥)

ZA 14



FS 36375

FS 17875

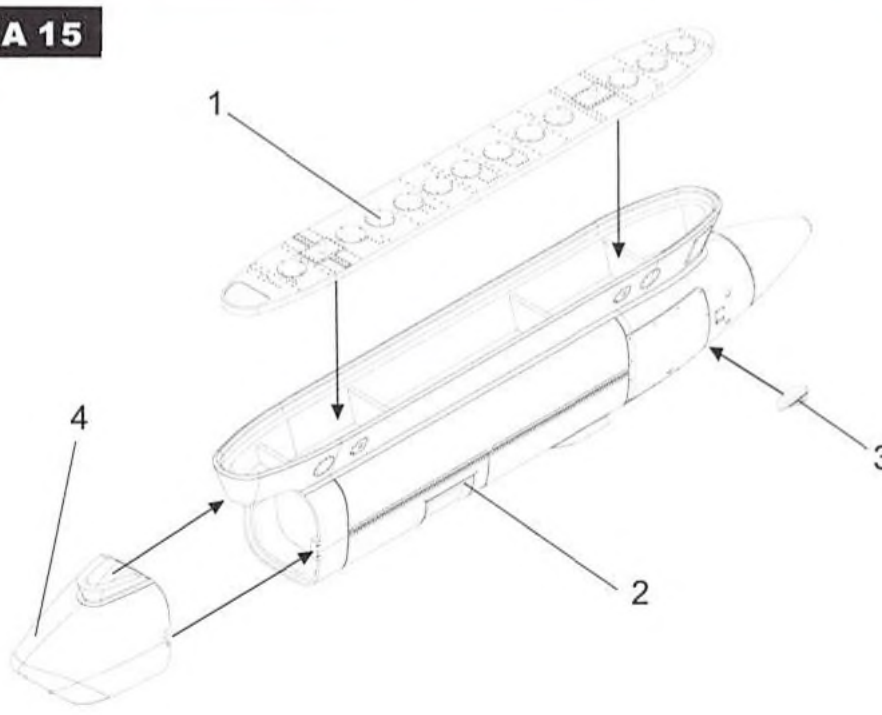


Tactical Airborne Reconnaissance Pod System (TARPS)
TARPS 偵察吊艙

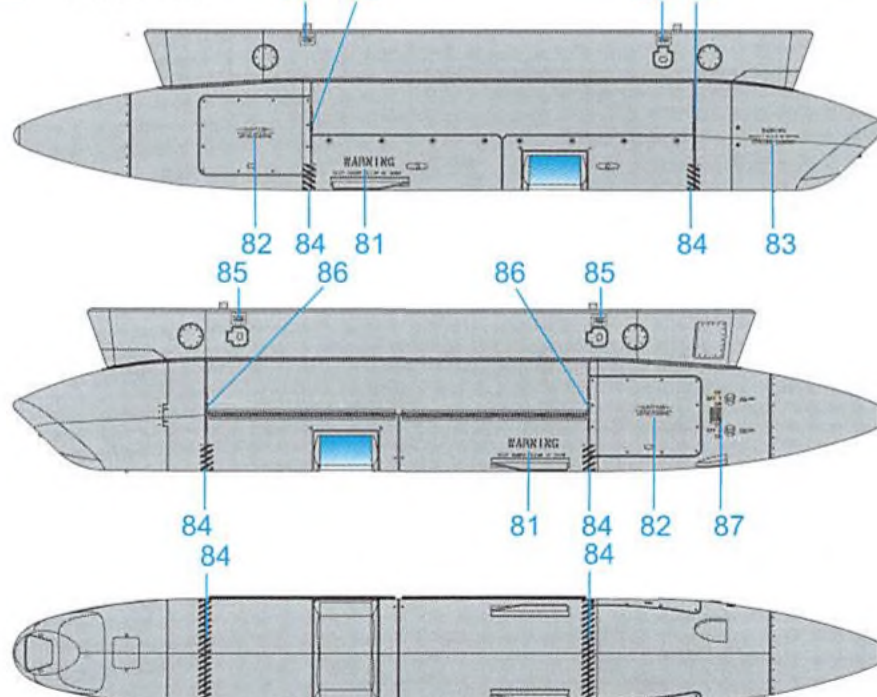
TARPS was carried on the rear left AIM-54 Phoenix station of the F-14 Tomcat but the placement neutralized the adjacent station. The unit could be fitted or removed in 30 minutes. Designed for the low/medium altitude clear air reconnaissance role, TARPS consisted of a 17.29ft (5.27m) shell with a max width of 2.21ft (0.67m). Fully equipped weight was 1,760lb with a standard load consisting of a KS-87M conventional frame camera in the nose, with a KA-99 low altitude panoramic camera mounted at the mid-point. Next to the KA-99 was an AN/AAQ-3A Infra-red scanner, for all-weather/all-hours reconnaissance missions.

F-14 掛載一套戰術空中偵察吊艙系統 (TARPS), 該吊艙中裝有一台偵察/光學照相機、一台低空全景照相機和一台紅外行掃描儀。還裝備一具數字成像系統, 該系統是一種高效的視線瞄準及偵察系統。此裝置可以在 30 分鐘內安裝或拆卸, TARPS 吊艙一般會與 ALQ-167 幹擾吊艙配合使用 (套件提供一體式偵察吊艙並且在頂部的安裝位置細節再現)

ZA 15



FS 36375

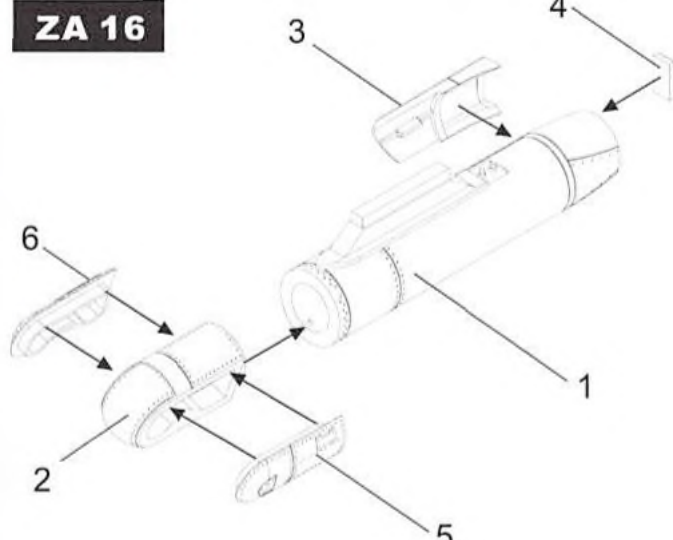


AN/AAQ-25 LANTIRN
AN/AAQ-25 藍盾吊艙系統

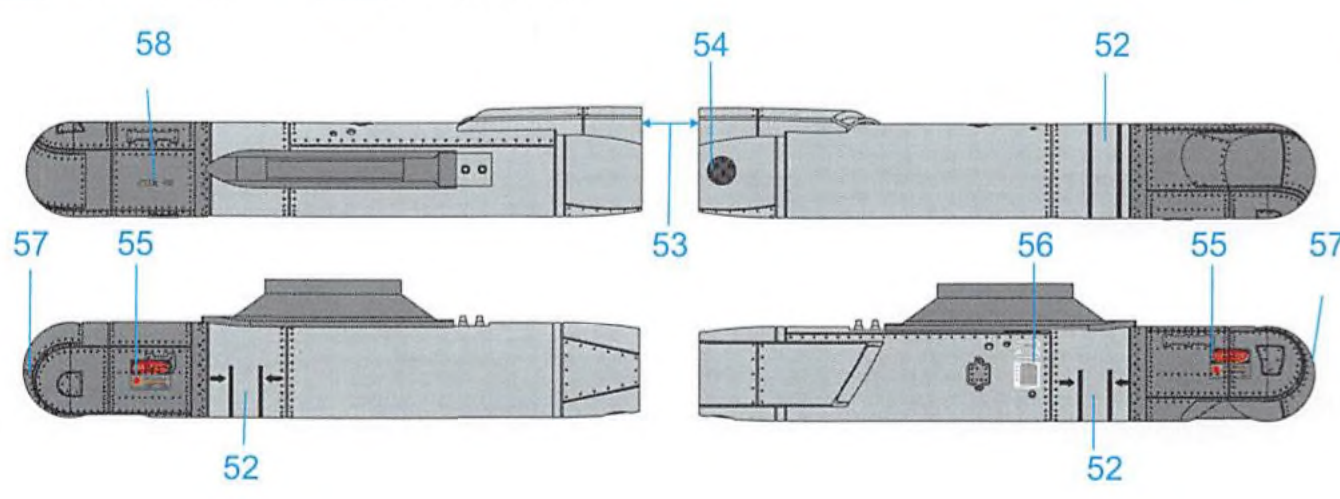
Low Altitude Navigation and Targeting Infrared for Night is a combined AN/AAQ-13 navigation and AN/AAQ-14 targeting pod system. LANTIRN significantly increases the combat effectiveness of these aircraft, allowing them to fly at low altitudes, at night and all-weather to attack ground targets with a variety of precision-guided weapons. The basic AN/AAQ-14 LANTIRN targeting pod was modified into the AN/AAQ-25 LANTIRN Targeting System (LTS) for Tomcat use. The LTS featured a Global Positioning System and inertial measurement. We have provided you with a poseable model so you can show this unit in any mode.

藍盾吊艙 AN/AAQ-14 是空軍的 LANTIRN (低空導航與夜視) 的紅外吊艙的一部分, 用于瞄準目標。該吊艙已經裝備 F-16C/D 與 F-15E, F-14 沒有安裝 AN/AAQ-13 導航吊艙, AN/AAQ-14 掛載在 F-14 右側翼下掛架上, 為此吊艙加裝了 GPS 天線, 所以吊艙可以直接獲取目標位置信息, 無需雷達的修正。1995 年 2 月, 該系統開始在 VF-103 的一架 F-14B 上進行測試, 1995 年 3 月 21 日這架測試機進行了首次試飛。1996 年 6 月首具吊艙開始交付。(套件提供分體式吊艙結構)

ZA 16



FS 36375 **FS 36118**



Mk.82 Bomb, Conical fin
Mk82 航空炸彈

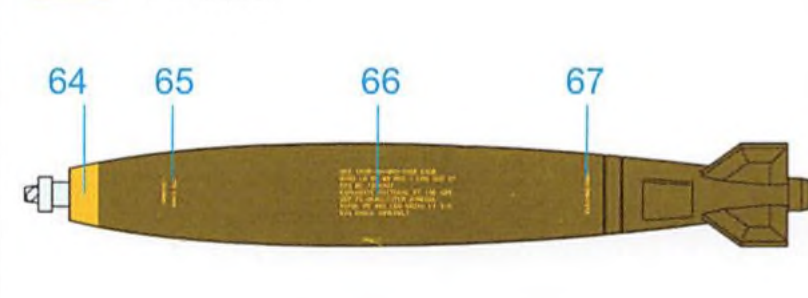
The Mk.82 and its variants are 500lb (227kg) low-drag, general-purpose aircraft bombs containing 89kg of high explosive. Originally dropped as an unguided bomb (sometimes referred to as an 'iron' or 'dumb' bomb), early versions of the Mk 82 were only able to hit their target 5.5% of the time, requiring large numbers of bombs to be dropped. Guided versions, such as the GBU-12 or GBU-38/54 use the bomb body of the Mk.82 as the payload.

MK82 航空炸彈是美國海軍于 50 年代為高速飛機研製的一種新型常規炸彈, 是 MK80 系列中的第二種, 也是目前世界上使用較廣泛的一種低阻炸彈。實際重量為 241 公斤, 能夠方便地加裝制導組件改進為精確彈藥 (套件提供完整的一體成型彈藥)

ZA 18



FS 34087

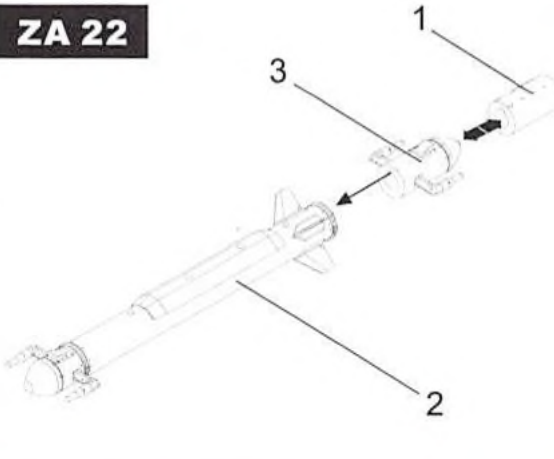


AN/ALQ-167 Bullwinkle
AN/ALQ-167 電子干擾吊艙

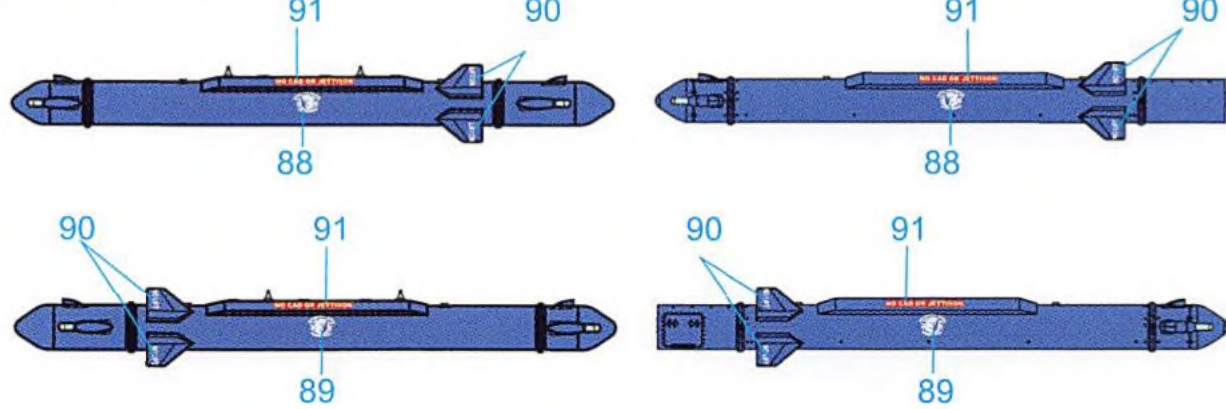
The Bullwinkle pod developed by Rodale™ for NATO's Multiservice Electronic Warfare Support Group (MEWSG) represents the leading edge of Electronic Warfare (EW) technology. These compact and versatile pods are qualified on a wide variety of aircraft ranging from business jets to supersonic fighters. Applications include ECCM training, radar test and evaluation as well as tactical self-protection, escort and stand-off jamming. We have provided this as a modular system so please check your references to depict the pod of choice.

AN/ALQ-167 是一種模塊化的導波與欺騙式幹擾系統 可用于訓練、模擬假想敵機配備的電子幹擾吊艙, 也可用于模擬空戰時的敵機電子幹擾效果。雷達測試和評估、以及自我保護、護航和備用幹擾假想敵機配備的電子幹擾吊艙, 可用于模擬空戰時的敵機電子幹擾效果。該吊艙用途十分廣泛可用于偵察機戰鬥機教練機等多種機型執行複雜任務 (套件給出 2 種吊艙選擇傳感器分別為 2 個/4 個)

ZA 22



FS 15180



AN/ASQ-713 SAIP Pod
SAIP 飛行數據吊艙

Mobile Sea Range (MSR) and Service Aircraft Instrumentation Package (SAIP) pods. The MSR had four 'spike' sensors mounted in a '+' configuration around the nose, the SAIP had four 'L' shaped pitot-like sensors in a similar configuration. Navy MSR pods were carried externally by the A-4, A-6E, A-7, AV-8, F-4, F-14, F/A-18, F-21 & C2/C7 (Kfir), P-3B/C, and S-3. We have provided this type for your models as they were used up to the mid 1990's.

SAIP 飛行數據吊艙在前部有四個 "+" 形狀的傳感器。該吊艙用于記錄飛行時的全過程中的主要飛行參數、武器使用情況等數據, SAIP 飛行數據吊艙的應用十分廣泛, 其長短粗細和 9X 相近, 能掛 AIM-9 的滑軌式掛架都能掛載它 (套件中提供的吊艙為一體成型保證了 "+" 形傳感器的細節和強度)

ZA 23



FS 31302 **Stainless**

