

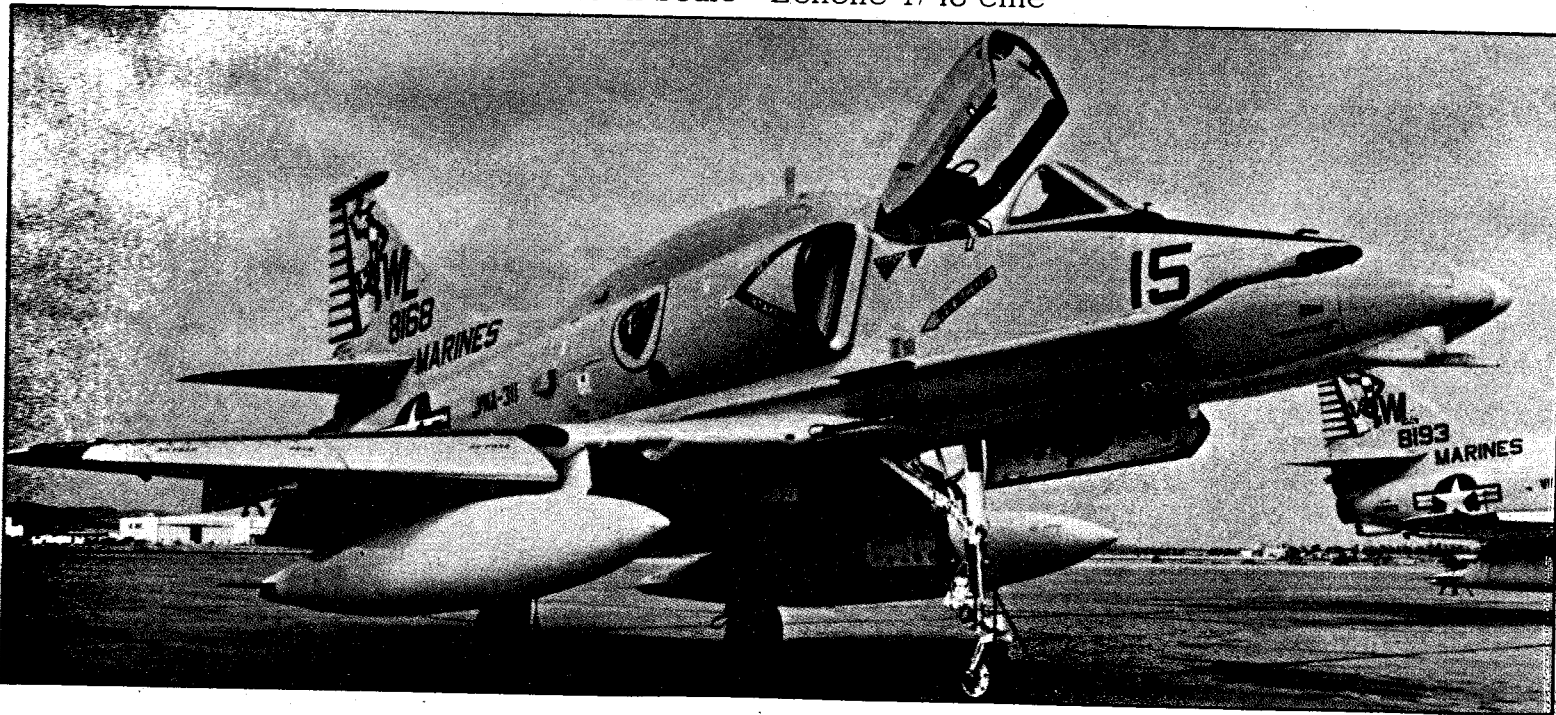
SCALE
CRAFT
MODELS
Of California

A-4 M/N SKYHAWK II

KIT. 4016 MADE IN ITALY



1/48 th Scale - Echelle 1/48 ème



The Skyhawk designed in 1952 by Ed Heinemann, Chief Designer at Douglas, has often been used as an example of good plane design. Created during the Korean war as a subsonic fighter-bomber for the U.S. Navy, it proved to be an exceptionally sturdy well armed light plane (5-11 tons) and indeed its validity is proved by the fact that it was kept in production for over twenty years. The prototype which first flew on June 22 1954 (piloted by Bob Rahn) was followed by the first mass produced version known initially as A4D-1 and then as A-4A.

The «second generation» Skyhawk (nicknamed Scooter because of its size) was the A4D-5 or A-4E, nicknamed «Mighty Mite» and was characterized by a considerable improvement in the performance and in the armament. The final evolution of the plane was the A-4M, made for the Marines and which represented the «third generation», which was known as Skyhawk II to underline the differences; in this version the engine thrust was increased to 1225 kgs making the plane exceptionally agile; the cockpit was restructured to give greater comfort, functionality and visibility; and finally the plane was not so «conditioned» by ground equipment, because of the new starting device and the parachute-brake. Almost identical is the A-4N version, specially made for Heyl Ha-Avir (the Israeli airforce) to be used as their standard support plane and only partially replaced by the Kfir (Kit. ESCI art. 4007). The U.S. Marine Corps by the mid Sixties had five of its attack squadrons for a total of 80 planes equipped with Skyhawks, whereas almost the same number are used as reserves by the U.S. Navy and the Marines.

Lo Skyhawk disegnato nel 1952 da Ed Heinemann, capo progettista della Douglas, è stato spesso portato ad esempio di buona progettazione aeronautica. Concepito durante la guerra di Corea quale caccia-bombardiere subsonico imbarcato per l'U.S. Navy, si dimostra come aereo leggero (5-11 tonn.) eccezionalmente robusto ed armato, e, la sua validità resta provata dal fatto che ne viene mantenuta la produzione per oltre venti anni. Al prototipo che volò per la prima volta il 22 giugno 1954 (pilotato da Bob Rahn), fa seguito la prima versione di serie, chiamata inizialmente A4D-1 e poi A-4A. La «seconda generazione» dello Skyhawk (sopranno-

minato «Scooter» per le sue piccole dimensioni) è rappresentata dall'A4D-5 o A-4E, ribattezzato in particolare «Mighty Mite» («Briciola Potente») e che fu caratterizzato da un sensibile miglioramento nelle prestazioni e nell'armamento. L'evoluzione finale della macchina è rappresentata dall'A-4M, realizzato per i Marines e rappresentativo della «terza generazione», da cui il nome Skyhawk II per sottolinearne il carattere di novità; in questa versione la spinta del motore aumenta di 1.225 Kgs. e l'aereo se ne avvantaggia dimostrando un'agilità eccezionale, tutto l'abitacolo è ristrutturato per consentire maggiori «comforts», funzionalità e visibilità, l'aereo risulta infine meno «condizionato» alle attrezzature a terra grazie ad uno starter per il motore ed al parachute-freno. Praticamente uguale è la versione A-4N espressamente realizzata su richiesta della Heyl Ha-Avir (Aviazione Israeliana), che ne fa il suo aereo da appoggio standard, solo parzialmente sostituito dallo Kfir (kit ESCI art. 4007). L'U.S. Marine Corps, da parte sua, arriva ad equipaggiare con gli Skyhawk, verso la metà degli anni sessanta, cinque dei suoi Squadroni d'attacco per un totale di 80 aeroplani, mentre quasi altrettanti risultano in servizio nella riserva congiunta dell'U.S. Navy e dei Marines.

Le Skyhawk, dessiné en 1952 par Ed Heinemann, chef du Bureau d'Etude de la société Douglas, a été souvent cité en exemple pour son excellente conception aéronautique. Conçu pendant la guerre de Corée, en tant que chasseur-bombardier subsonique, destiné à l'U.S. Navy, il est considéré comme un avion léger (5-11 tonnes) exceptionnellement robuste et bien armé, et le fait que sa production a été maintenue pendant plus de vingt ans est une preuve concrète de sa validité.

Le prototype, qui vola pour la première fois le 22 juin 1954 (piloté par Bob Rahn), fut suivi par une première version de série, appelée initialement A4D-5 et, ensuite, A-4A.

La seconde génération du Skyhawk (surnommé «Scooter» à cause de ses petites dimensions) est représentée par le A4D-5 ou A-4E, rebaptisé en particulier «Mighty Mite» (Miette puissante), et caractérisée par une sensible amélioration de ses performances et de son armement. L'évolution finale de l'appareil est représentée par le A-4M, réalisé pour les Marines et constituant la troisième géné-

ration. d'où le nom de Skyhawk II, afin de souligner le caractère de nouveauté. Dans cette version, la poussée du moteur augmente de 1.225 kgs, ce qui donne à l'appareil une agilité exceptionnelle; tout l'habitacle est restructuré pour fournir plus de confort, ainsi qu'une maniabilité et une visibilité plus grandes. De plus, l'appareil est moins «assujetti» aux équipements à terre, grâce à un starter pour le moteur et à son parachute de freinage. La version A-4N est pratiquement identique; elle a été réalisée tout spécialement à la demande de la Heyl Ha'Avir (Aviation Israélienne), qui en a fait son appareil d'appui standard, remplacé qu'en partie par le Kfir (kit ESCI art. 4007).

Vers la moitié des années soixante, l'U.S. Marine Corps équipe ses Escadrons d'attaque d'appareils Skyhawk, au total 80 avions. Un nombre à peu près égal d'appareils sont en service auprès de la Réserve de l'U.S. Navy et des Marines.

Das Flugzeug Skyhawk, im Jahre 1952 von Ed Heinemann, leitender Ingenieur der Douglas, entworfen, wurde oft als Beispiel der guten aeronautischen Planung und Entwicklung zitiert. Während des Korea-Kriegs als Bombenjäger mit Unterschallgeschwindigkeit gebaut und dann für die U.S. Navy eingeschifft, zeigte sich diese leichte Maschine (5 - 11 to) als aussergewöhnlich robust und bewaffnet, und ihre Wirksamkeit ist durch die Tatsache erprobt, dass die Produktion über 20 Jahre lang aufrecht erhalten blieb. Dem Prototyp, der am 22.6.1954 mit dem Piloten Bob Rahn zum ersten Mal startete, folgte eine erste Version in Serienherstellung, die anfänglich unter dem Kennzeichen A4D-1 und dann unter A-4A flog. Die «zweite Generation» des Skyhawk (mit dem Beinamen «Scooter», wegen seinen kleinen Dimensionen), durch den A4D-5 oder A-4E vertreten und auf «Mighty Mite» («Starkes Krümchen») umgetauft, war durch eine fühlbare Verbesserung in den Leistungen und in der Bewaffnung charakterisiert. Die endgültige Maschine ist der Typ A-4M, die für die Marine realisiert wurde und die «dritte Generation» darstellt. Diese Serie trägt den Namen Skyhawk II, um die neuen Eigenschaften zu unterstreichen. In dieser Version ist die Schubkraft des Motors um 1.225 kg höher, die dem Flugzeug eine aussergewöhnliche Wendigkeit verleiht. Der ganze Rumpf ist komfortabler, zweckbestimmter und mit besserer Sicht gebaut worden. Schliesslich erweist sich die Maschine, dank einem Motorstarter und dem Bremsfallschirm, weniger von den Ausstattungen und Anlagen der Flugplätze ab-

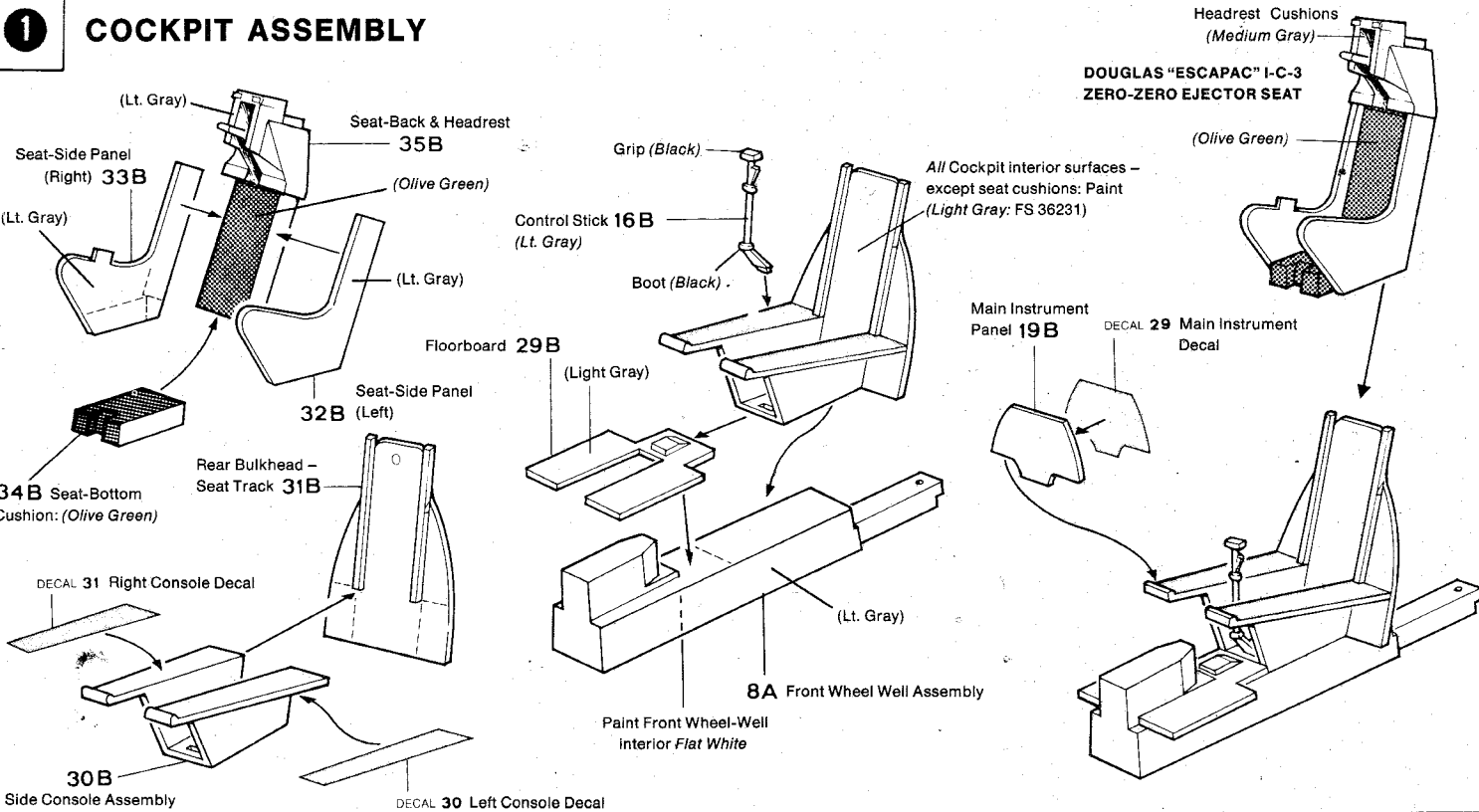
hängig. Die Version A-4N, eigens auf Wunsch der Heyl Ha' Avir (Israelitische Luftwaffe) hergestellt, ist praktisch die Gleiche und stellt das Standard-Flugzeug dar und wird nur teilweise durch den Kfir ersetzt (Kit ESCI Art. 4007). Gegen Mitte der 60er Jahre stattete das U.S. Marine Corps fünf seiner Angriffs-Schwadronen mit dem Skyhawk aus (total 80 Flugzeuge), während fast die gleiche Anzahl im Reserve-Dienst der U.S. Navy und der Marines steht.

El Skyhawk, dibujado en 1952 por Ed Heinemann, proyectista en jefe de Douglas, se lleva a menudo como ejemplo de buen proyecto aeronáutico. Ideado durante la guerra de Corea como caza-bombardero subsónico embarcado para la U.S. Navy, se demuestra, como avión liviano (5-11 toneladas) excepcionalmente robusto y armado y, su validez queda confirmada por el hecho de que su producción se continúa por más de veinte años.

Al prototipo que voló por primera vez el 22 de Junio de 1954 (piloto, Bob Rahn), sigue la primera variante de serie, llamada inicialmente A4D-1 y luego A-4A.

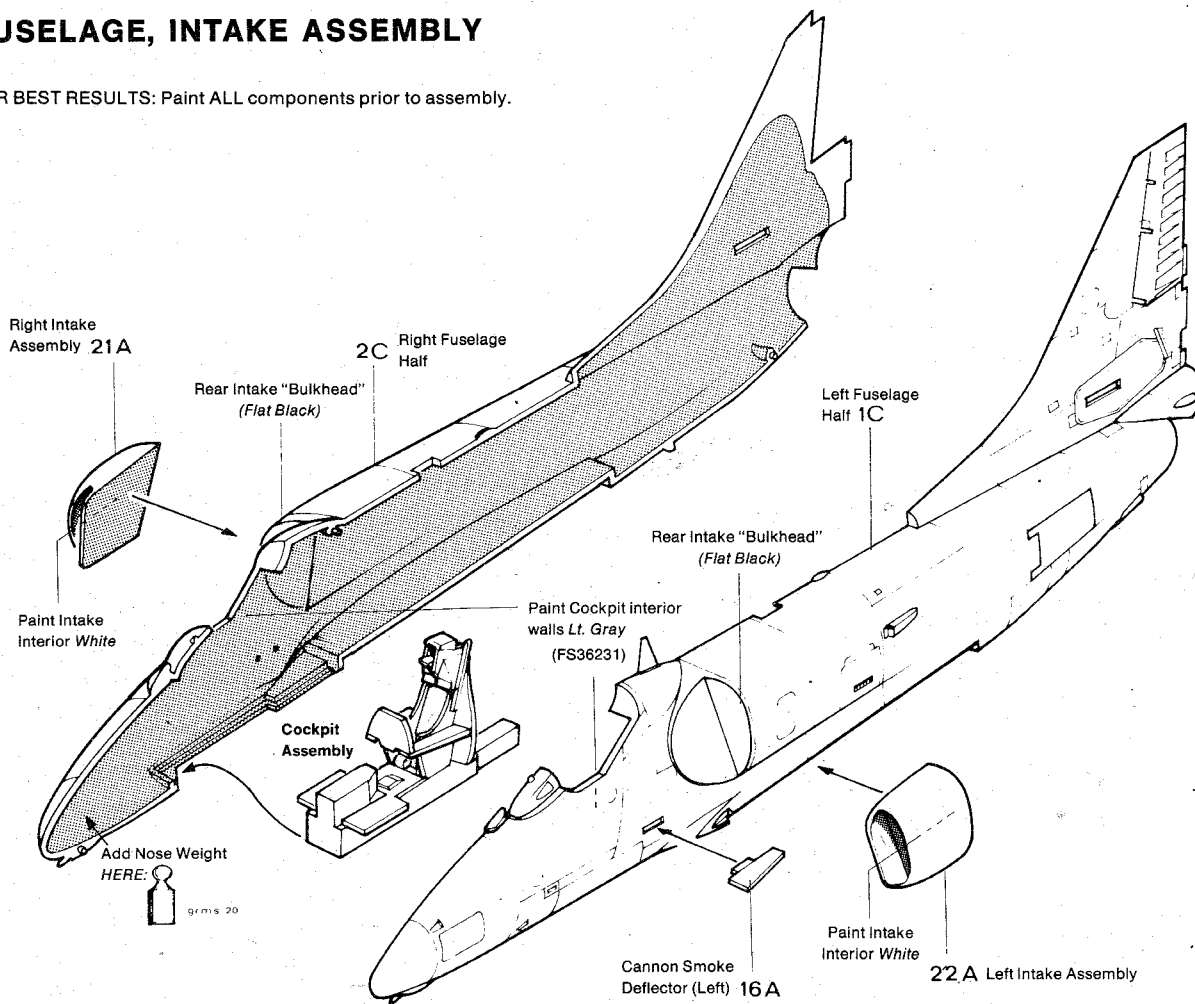
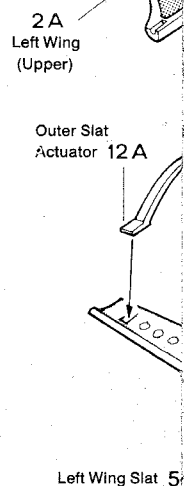
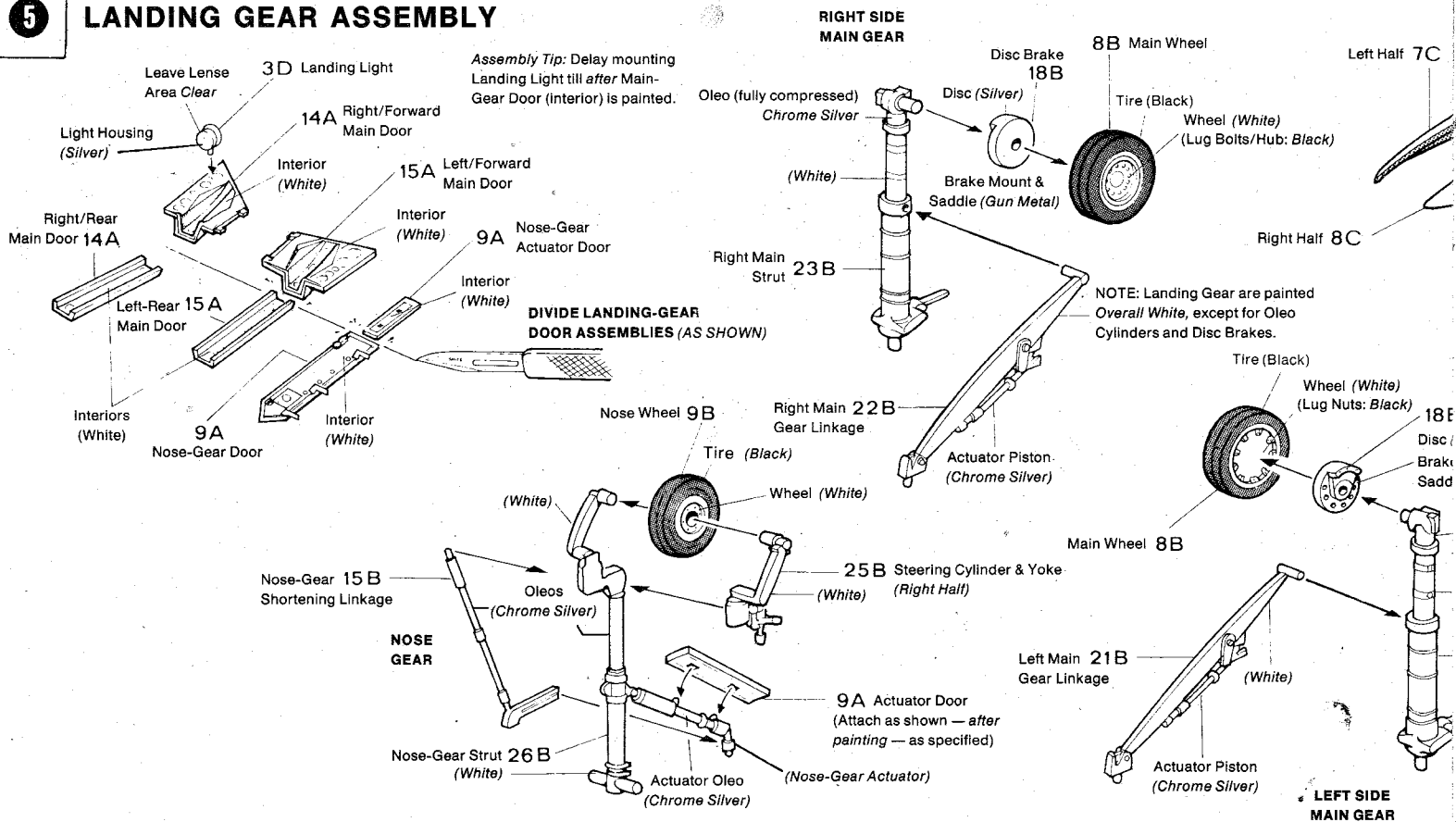
La «segunda generación» del Skyhawk (apodado «Scooter» por sus pequeñas dimensiones) es representada por el A4D-5 ó A-4E, rebautizado «Mighty Mite» (migaja poderosa) y que fue caracterizado por una sensible mejora en las prestaciones y en el armamento. La evolución final de la máquina es representada por el A-4M, realizado para los Marines y que representa la «tercera generación», de donde el nombre Skyhawk II para subrayar su carácter de novedad; en esta variante el empuje del motor aumenta de 1.225 Kgs. y el avión adquiere ventaa demostrandø una excepcional agilidad, todo el habitáculo es reestructurado para consentir mayores «comforts», funcionalidad y visibilidad; el avión resulta por fin menos «condicionado» a los equipos de tierra gracias a un starter para el motor y al paracaídas-freno. Prácticamente igual es la variante A-4N expresamente realizada sobre demanda de Heyl Ha' Avir (Aviación Israelita), que hace de él, su avión de apoyo standard, sólo parcialmente sustituido por Kfir (kit ESCI art. 4007). El U.S. Marine Corps, por su parte, llega a equipar con los Skyhawk, a eso de la mitad de los años sesenta, cinco de sus escuadrones de ataque, por un total de 80 aviones, mientras casi otros tantos resultan en servicio en la reserva enlazada del U.S. Navy y de los Marines.

1 COCKPIT ASSEMBLY



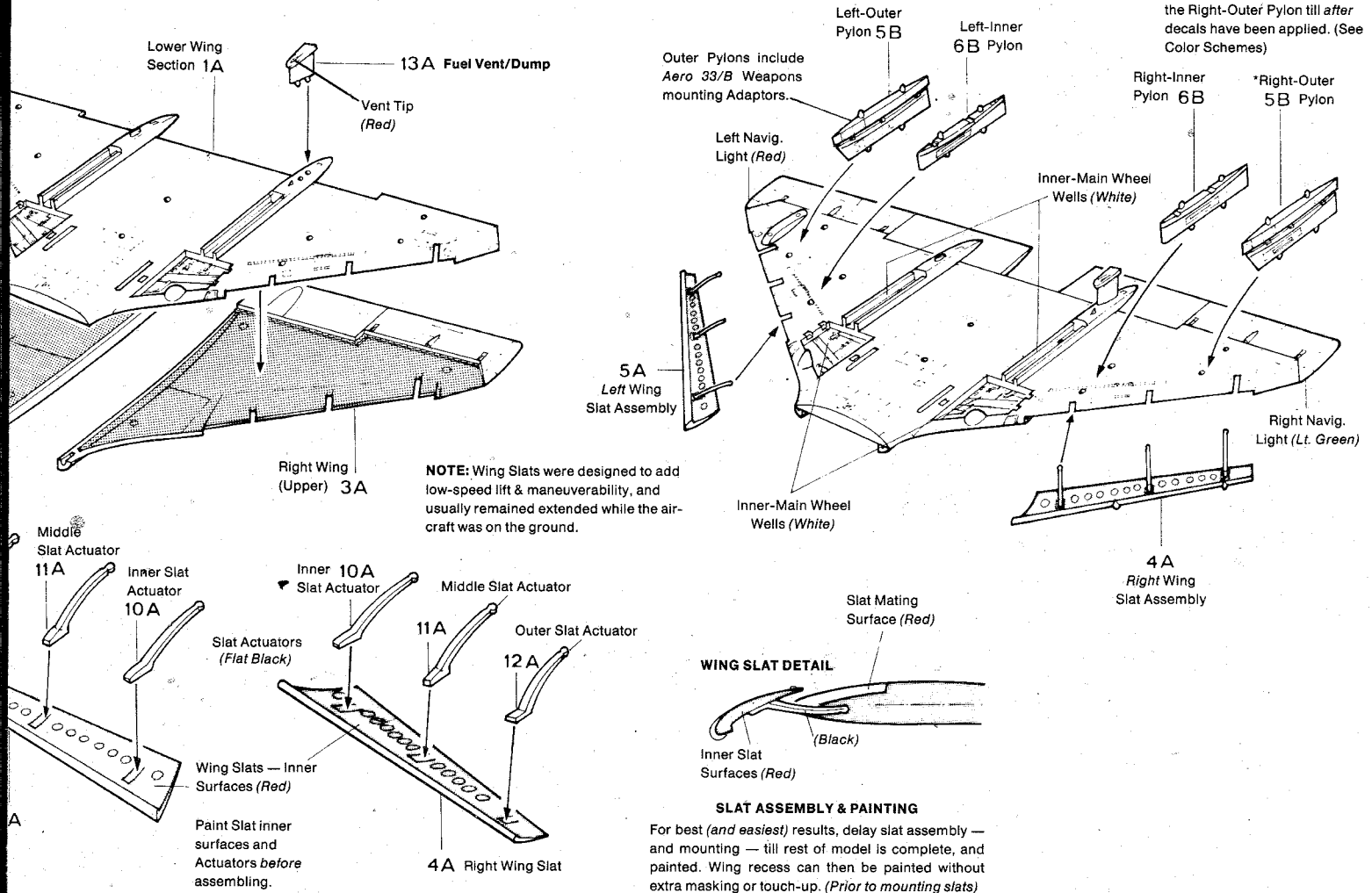
2**FUSELAGE, INTAKE ASSEMBLY**

FOR BEST RESULTS: Paint ALL components prior to assembly.

**3****WING****5****LANDING GEAR ASSEMBLY**

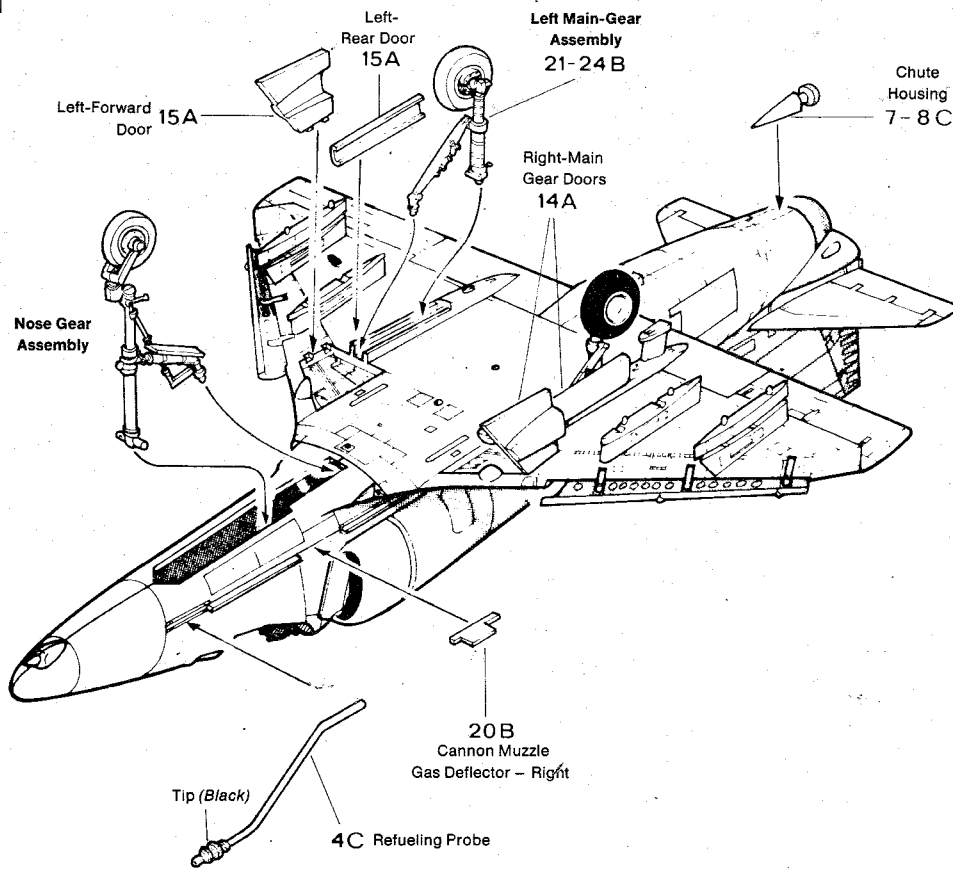
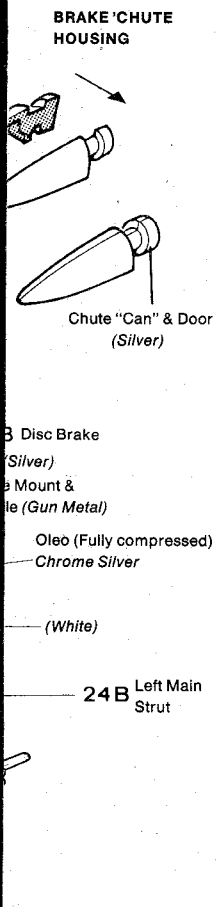
WING-SLAT AND PYLON ASSEMBLY

WARNING: For A-4M (USMC) versions, **DO NOT** mount (at least) the Right-Outer Pylon till after decals have been applied. (See Color Schemes)



6

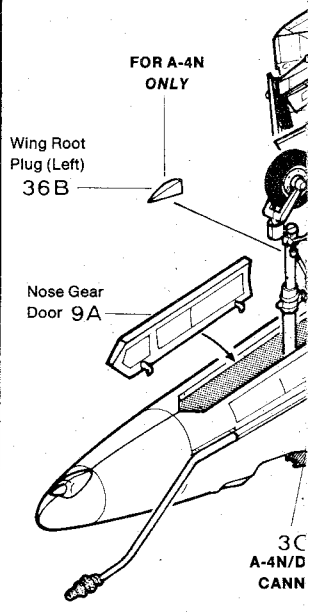
LANDING GEAR, REFUELING PROBE MOUNTING



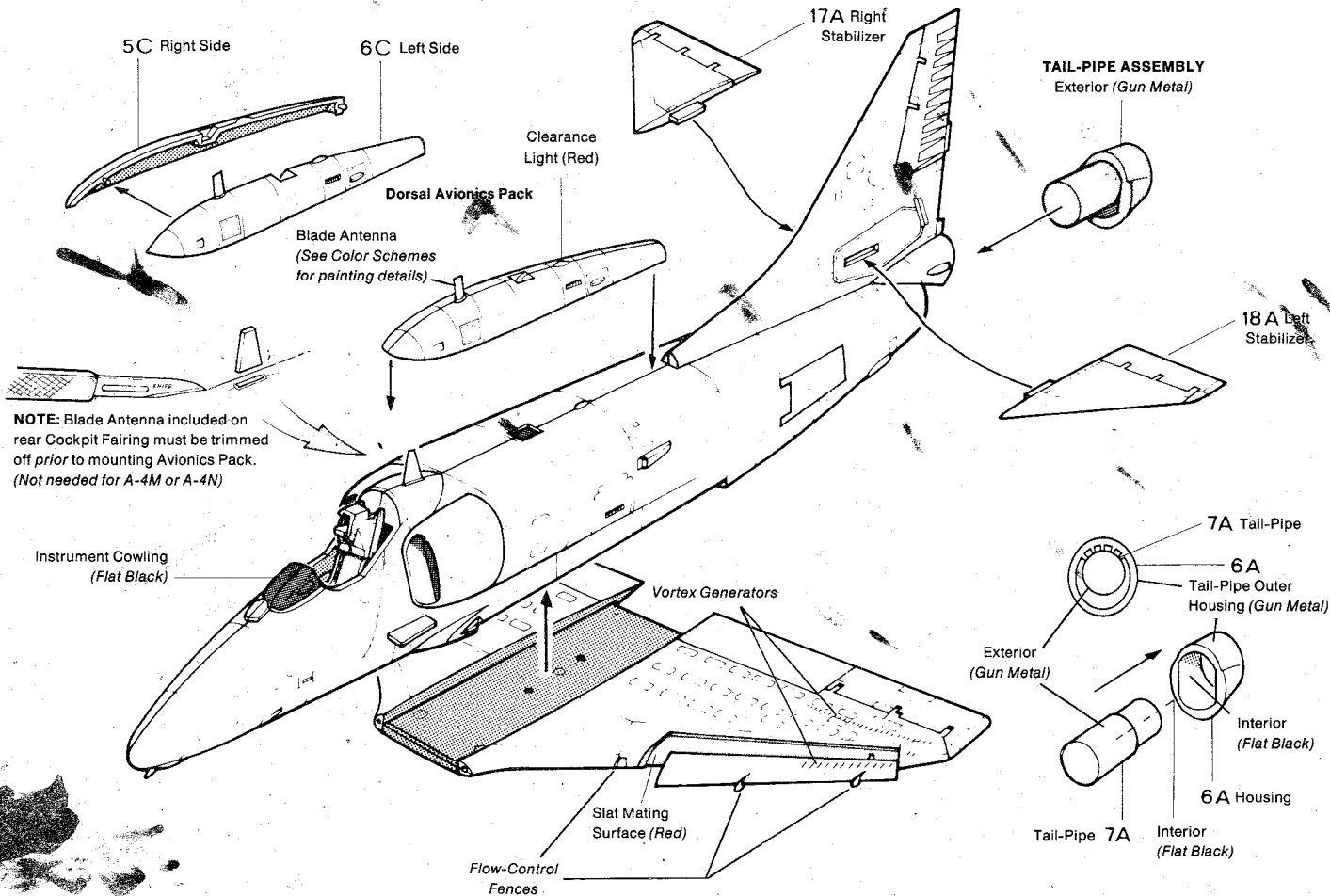
7

DETAIL ASSEMBLY

NOTE: This assembly step is required for A-4N (Israeli) Gun 8 for A-4M.

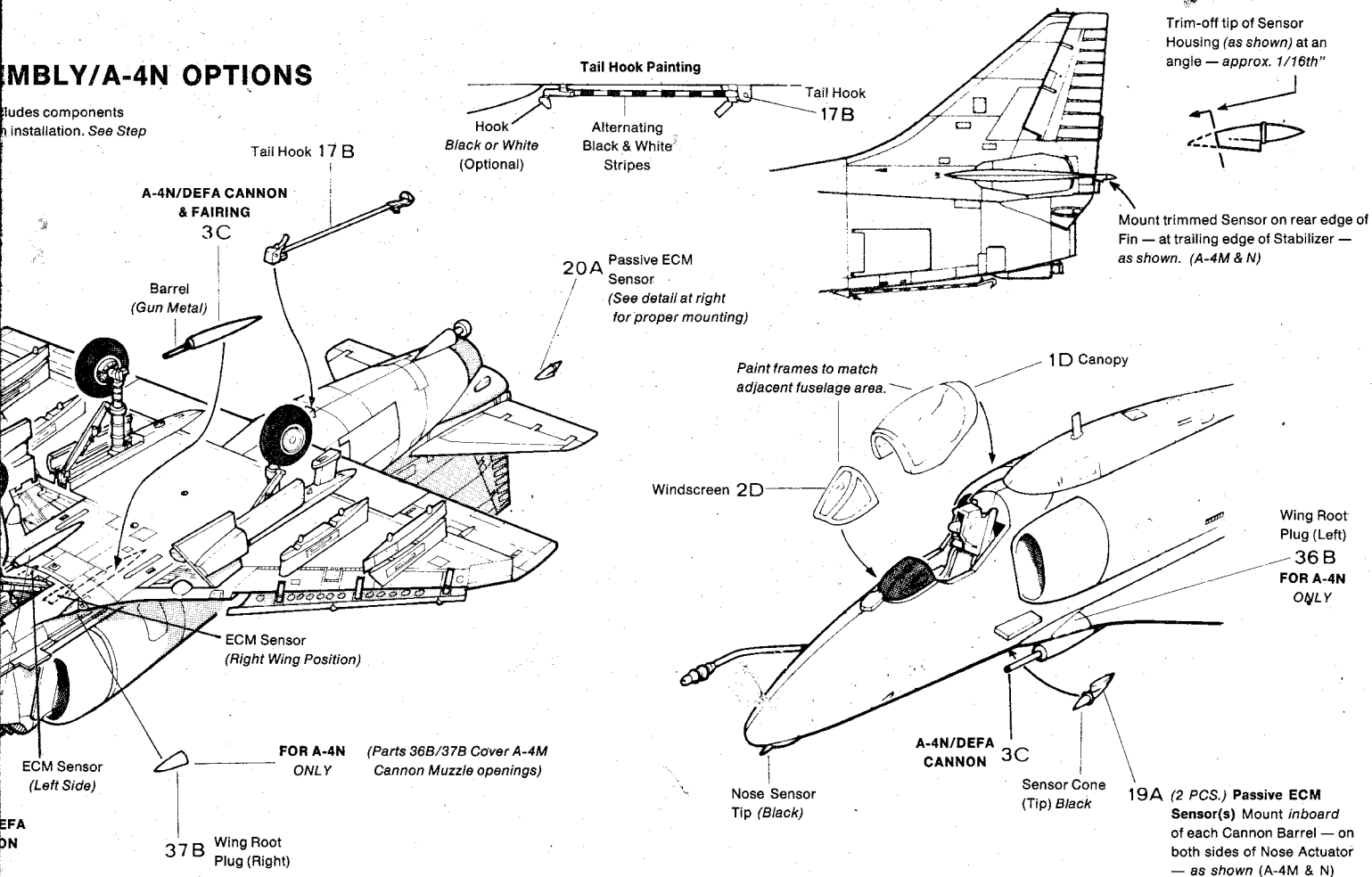


BASIC AIRFRAME ASSEMBLY

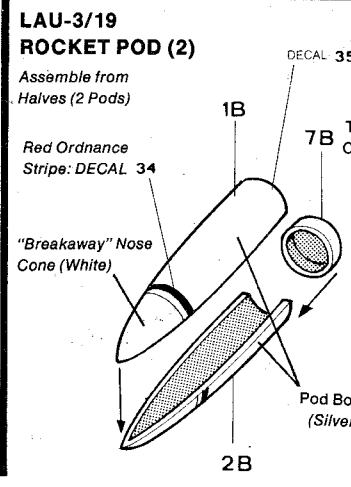
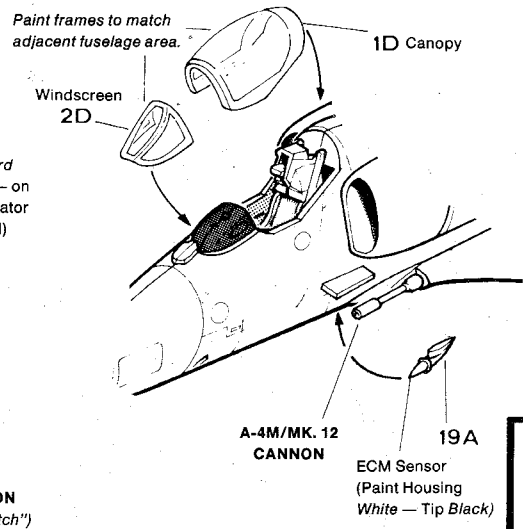
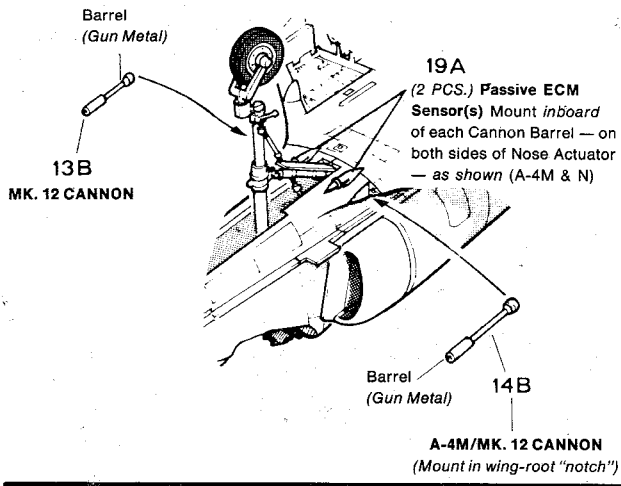


ASSEMBLY/A-4N OPTIONS

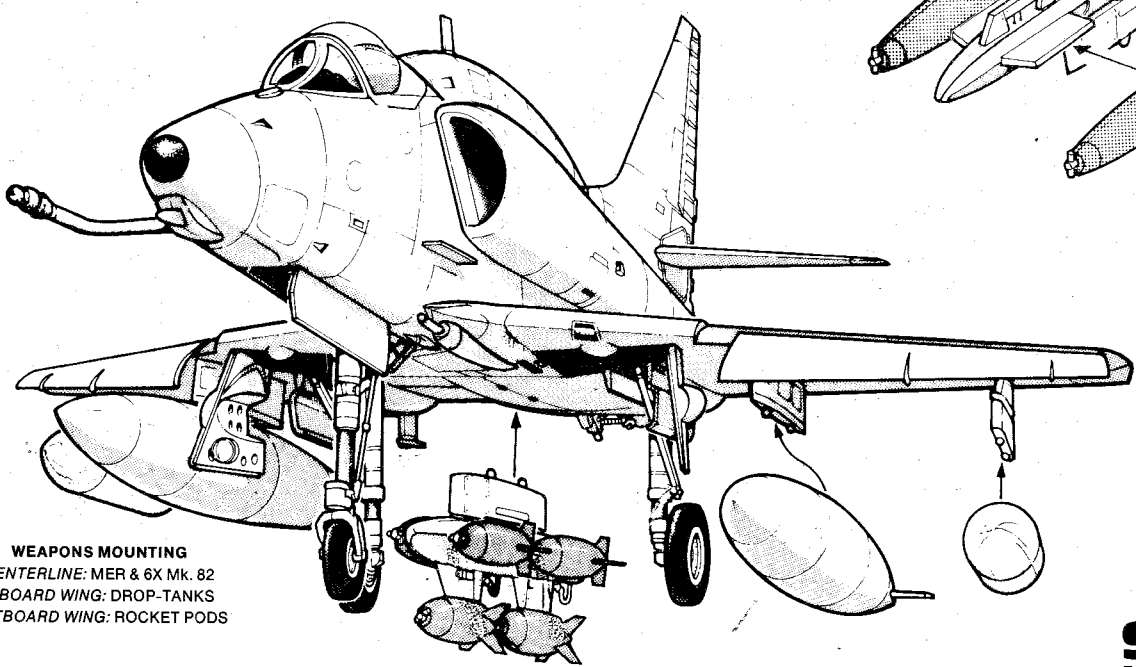
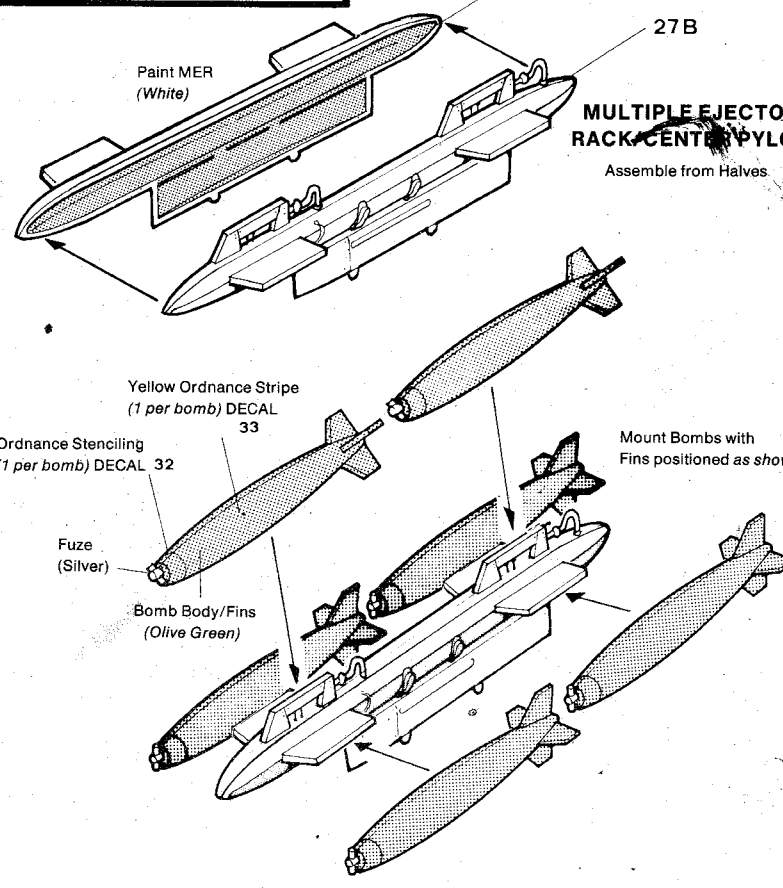
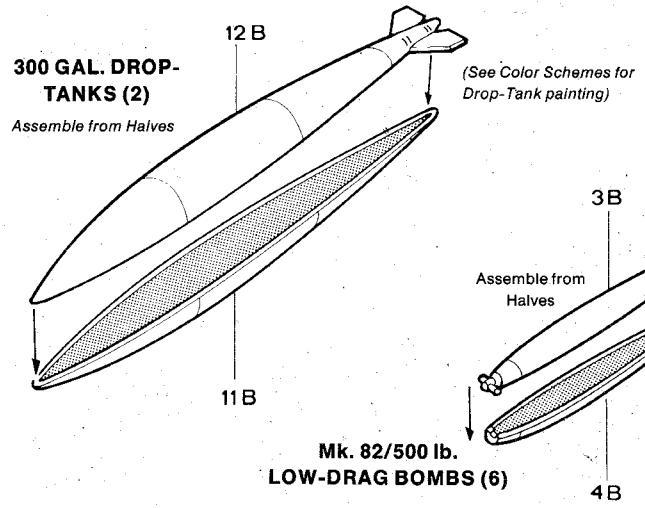
Includes components in installation. See Step



8 A-4M OPTIONS — ASSEMBLY



9 WEAPONS ASSEMBLY & MOUNTING



WEAPONS MOUNTING
 CENTERLINE: MER & 6X Mk. 82
 INBOARD WING: DROP-TANKS
 OUTBOARD WING: ROCKET PODS

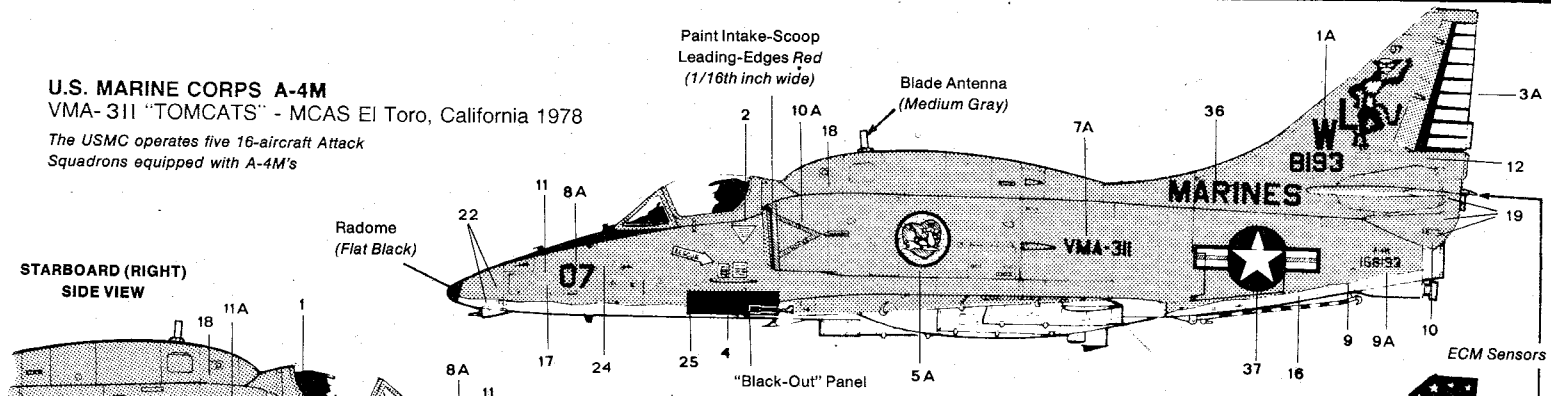
A-4M/N WEAPONS OPTIONS (NOT INCLUDED)

CENTERLINE
 3575 lb. (1620 Kg): 150/300/400 Gal. Tanks,
 6 x Mk. 82 Low-Drag, "Rockeye", etc.

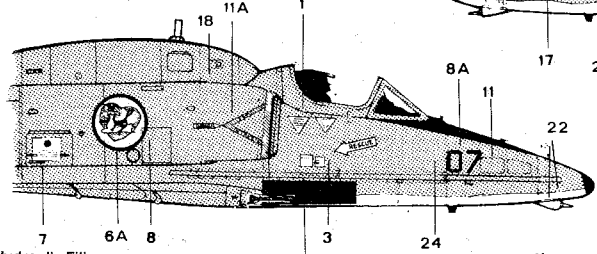
INBOARD WING PYLON
 2240 lb. (1015 Kg): Seen with MER & various combinations of Mk. 82/83/84 bombs, as well as LAU-3/19 Pods

OUTBOARD WING PYLON
 570 lb. (258 Kg): Mk. 82 (1), ECM Pod
 (See SC-4015: Modern Aircraft Weapons)

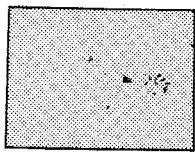
U.S. MARINE CORPS A-4M
VMA-311 "TOMCATS" - MCAS El Toro, California 1978
The USMC operates five 16-aircraft Attack Squadrons equipped with A-4M's



STARBOARD (RIGHT) SIDE VIEW

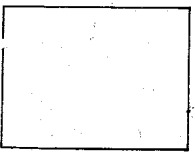


Hydraulic Filler Panel (A-4M's)



GULL GRAY-GLOSS

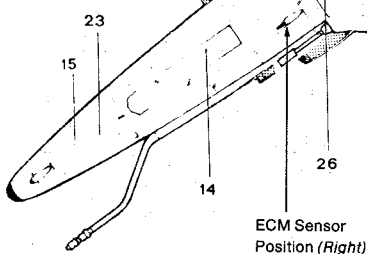
FS 16440
 (UPPER SURFACES)



INSIGNIA WHITE-GLOSS

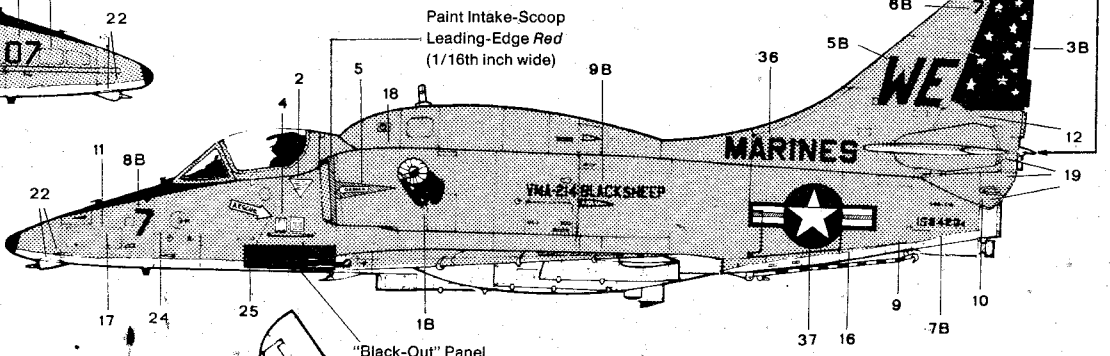
FS 17875
 (UNDER SURFACES)

Passive ECM Sensor (Left)

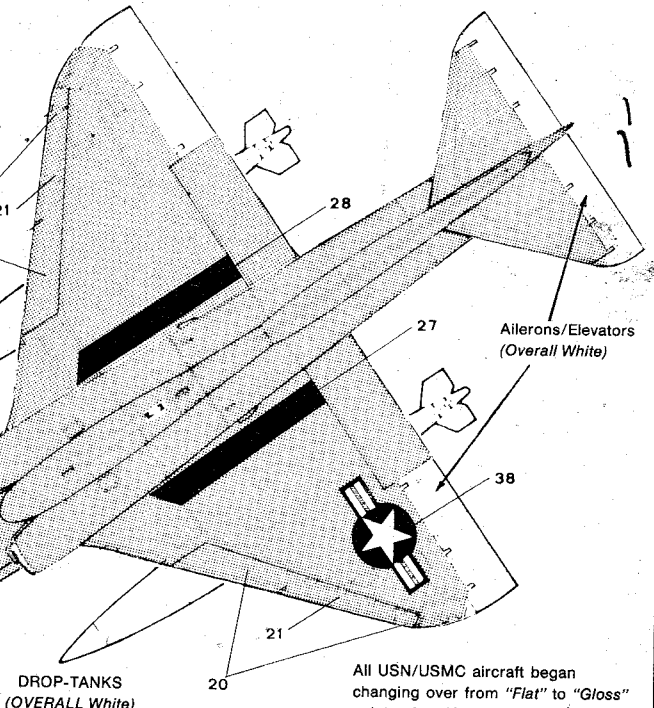
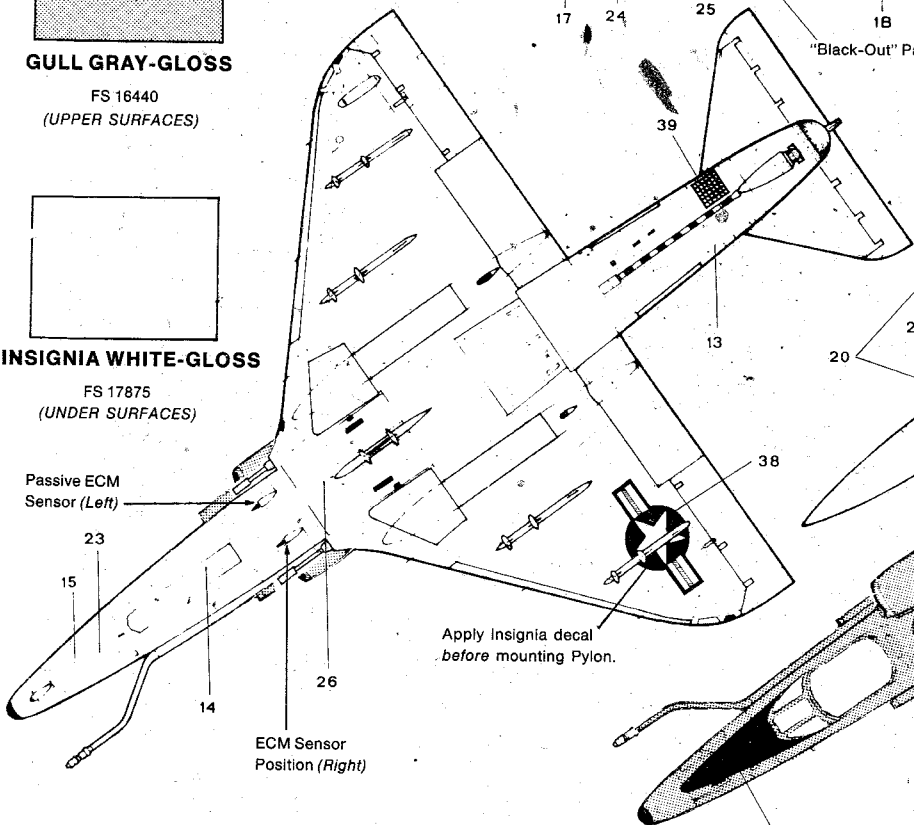


ECM Sensor Position (Right)

Apply Insignia decal before mounting Pylon.

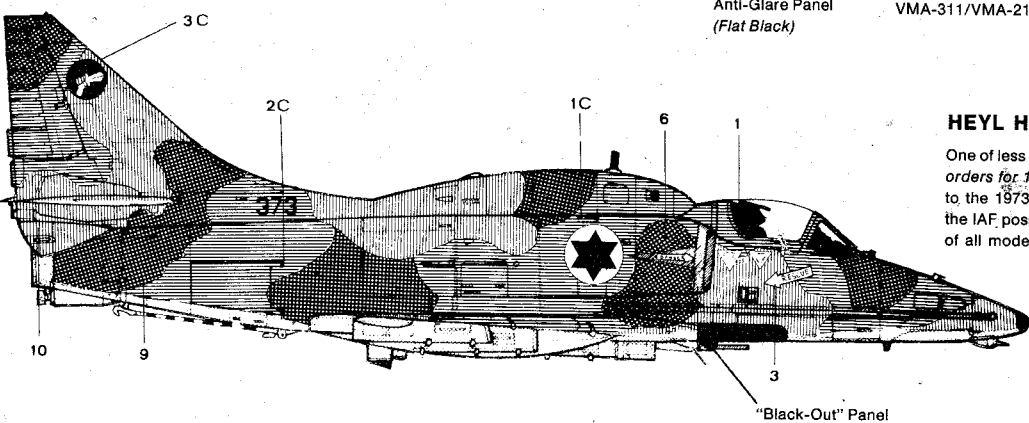


U.S. MARINE CORPS A-4M
VMA-214 "BLACKSHEEP" - Iwakuni A.B., Japan 1977.



DROP-TANKS (OVERALL White)
 VMA-311/VMA-214

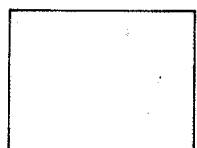
All USN/USMC aircraft began changing over from "Flat" to "Gloss" paints after 1970-71.



Israeli Air Force colors are all "Flat"

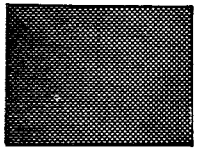
HEYL HA' AVIR A-4N

One of less than 80 "Skyhawk-II" (from orders for 104 A-4N's) to be delivered prior to the 1973 "October War", at which time the IAF possessed approximately 270 A-4's of all models. (A-4E/H & N)

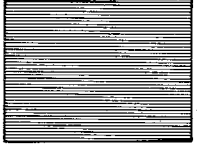


LT. GRAY-FLAT

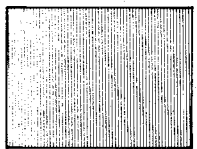
FS 36622
 (UNDER SURFACES)



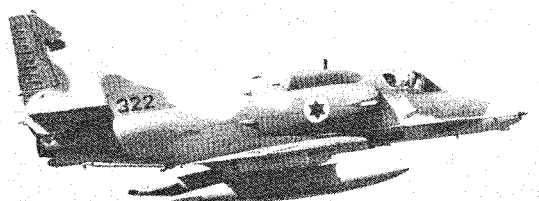
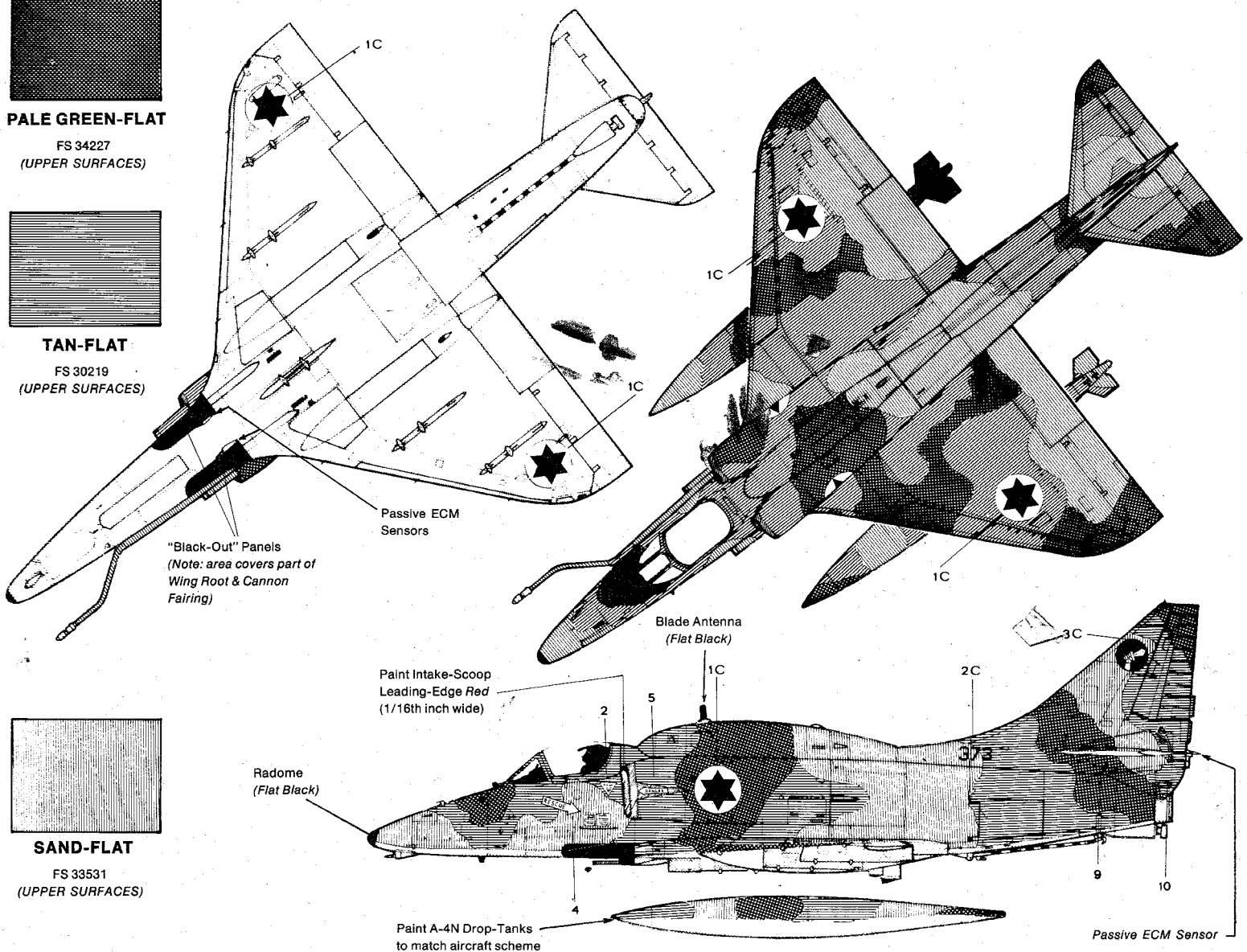
PALE GREEN-FLAT
FS 34227
(UPPER SURFACES)



TAN-FLAT
FS 30219
(UPPER SURFACES)



SAND-FLAT
FS 33531
(UPPER SURFACES)



MCDONNELL DOUGLAS A-4M/N DATA

ENGINE:

One Pratt & Whitney J52-P-408A Turbo-Jet: 11,200 lb. Static Thrust (5080 Kg.) **NO AFTERBURNER.**

DIMENSIONS:

Wing Span: 27 ft. 6 in. (8.38m) • Length: 40 ft. 3.75 in. (12.28m) • Height: 15 ft. (4.57m) • Wing Area: 260 sq. ft. (24.16m²) • Leading-edge Sweepback: 33.2°

WEIGHTS:

Empty: 10,465 lb. (4,747 Kg) • Basic Operating Weight — *No Fuel or Ordnance*: 12,280 lb. (5,570 Kg) • Maximum Loaded — *Shipboard*: 24,500 lb. (11,113 Kg) • Maximum Overloaded — *Land Based*: 27,420 lb. (12,437 Kg) • Maximum Internal Fuel: 800 U.S. Gal. (3,028L)/5202 lb. (2360 Kg)

CARACTERISTIQUES ET DONNEES TECHNIQUES

Mc Donnell-Douglas A-4M Skyhawk II
Moteur: un turboréacteur à flux axial Pratt & Whitney JT8B-5 J526P 408A de 5.080 kcp (50 kN).
Dimensions: longueur: 12.28 (à l'exclusion de la sonde pour le ravitaillement en vol) - hauteur: 4.57 m - envergure: 8.38 m - surface portante: 24.16 m².
Poids: à vide: 4.747 kg - à vide avec équipage: 4.900 kg - total: 11.115 kg (et maximum au décollage en charge) - maximum au décollage en surcharge (du sol): 12.440 kg.
Performances: vitesse maximum: 1.086 km/h au niveau du sol (Mach 0.89) - vitesse ascensionnelle au départ: 42.87 m/sec - plafond pratique: 13.000 m - autonomie maximum (à 11.115 kg de poids): 3.225 km.
Armement: 2 canons Colt-Browning Mk14 de 20 mm dc 200 coups chacun - 4.530 kg de charges extérieures, réparties en cinq points (bombes, missiles, réservoirs pendulaires).
Même caractéristiques pour l'A-4N, qui est toutefois armé de 2 canons DEFA 553 de 30 mm de 150 coups chacun.

PERFORMANCE:

Maximum Speed, Clean — *At Sea Level*: 582 Knots/670 mph — Mach 0.89 (1,078 Km/H) • Speed — *with 4,000 lb. Ordnance*: 560 Knots/645 mph (1,038 Km/H) • Rate of Climb — *From Sea Level*: 8,440 ft./min. (4.3m/sec.) • Tactical Radius — *4,000 lb. Ordnance & Full Fuel Load*: 150n.m./172 st. miles with 65 Loiter Minutes • Maximum Range — 1,800 Gals. Fuel: 1,785 n.m./2,053 st. miles (3,307 Km)

ARMAMENT:

Internal: Two Mk.12 20mm Single-Barrel Cannon with 400 Rounds *each* (A-4M) or Two DEFA 552/553 30mm Single-Barrel Cannon with 150 Rounds *each* (A-4N) • Five External Weapons Stations/Pylons: Maximum Load 9,155 lb. (4,153 Kg)

CARACTERISTICAS Y DATOS TECNICOS

Mc Donnell-Douglas A-4M Skyhawk II
Motor: un turborreactor de flujo axial Pratt & Whitney JT8B-5 J52-P-408A de 5.080 Kg/s (50 kN).
Dimensiones: largo: m. 12.28 (excluyendo la sonda para el aprovisionamiento en vuelo) - alto: m. 4.57 - apertura de las alas: m. 8.38 - superficie de las alas: m² 24.16.
Pesos: en vacío: Kgs. 4.747 - en vacío equipado Kgs. 4.900 - total Kgs. 11.115 (máximo al despegue embarcado) - máximo al despegue con sobrecarga (desde tierra): Kgs. 12.440.
Prestaciones: velocidad máxima 1.086 Km/h a cota cero (Mach 0.89) - ascensional inicial 42.87 m/seg. - tangencia práctica 13.000 m. - autonomía máxima (con peso de 11.115) 3.225 Km.
Armamento dos cañones Colt-Browning Mk. 14 de 20 mms. con 200 golpes por arma - cinco puntos de ataque por 4.530 Kgs. de carga bélica. Las mismas características se aplican generalmente también al A-4N, que, desde luego, es armado con dos cañones DEFA 553 de 30 mms. con 150 golpes por arma.