Outline

- A-4 overview
- Squadron missions
- General data
- Configuration
- Armament
- IAF improvements
- Maintenance & logistics
- Summary
A-4 SKYHAWK
A-4 Overview

- High maneuverability, easy to operate
- Outstanding armament ability
- Impressive payload capability
- Reliable, robust platform
- Long range and high flight endurance
- NATO compatibility
Why A-4

Advantages of A-4 operation

- Proven, reliable & robust platform
- Low cost maintenance based on flight hours
Why A-4 (Cont.)

Advantages of A-4 operation (cont.)

- Extensive use of “on condition” maintenance concept
- Simple operation and support
- Easy to learn - for air and ground crews
- High system survivability
Satisfied Customers

**BAE Systems USA**
- Training NATO combat squadrons
- Purchased 4 Aircraft in 2000
- Upgrades were conducted by Israel Aircraft Industries

**ATSI - Advanced Training Services Inc company**
- Training US Air Force and Navy combat squadrons
- Purchased 13 Aircraft in 2000
- IAF intensively assisted in refurbishing the aircraft
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A-4 Squadron Missions

Attack and Close Air Support
A-4 Squadron Missions

Air to Air Combat
A-4 Squadron Missions

Training
A-4 Squadron Missions

Illumination
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General Data

- Dimensions
- Weights
- Basic Performance
- Power Plant
- Fuel System
- IAF A-4 Aircraft
Dimensions

**Dimensions:**

*Wing span* – 8.38 meters

*Length* – 12.27 meters

*Height* – 4.57 meters

*Wing area* – 24.16 sqm
Dimensions (cont.)

- 42 feet 9 inches
- 39 feet 0 inches
- 27 feet 6 inches
- 11 feet 4 inches
- 39 feet 8-1/2 inches
- 2 feet 11 inches
- 42°
Dimensions (cont.)

* AIRCRAFT REWORKED PER A-4 AFC 461
Dimensions (cont.)

NOTE
DIMENSIONS ARE TAKEN WITH THE LANDING GEAR SHOCK STRUT AND TIRES INFLATED TO THE CORRECT PRESSURES.

4 FEET 8-1/4 INCHES

7 FEET 9-1/2 INCHES

STATIC GROUND LINE
Weights

Weights:

Empty – 4,808 kg

Max. T-O weight – 11,113 kg

Combat weight (50% internal fuel + A/A missiles) – 6,818 kg

Wing loading (combat configuration) – 58 lb/ft²

Thrust to weight ratio (combat configuration) – 0.62
Basic Performance

Performance:

Max. speed – 1,071 kmh
Approach speed – 207 kmh
Max. mach no. – 1.1 M
Max. mach high altitude – 0.92 M
Max. altitude – 45,000 ft
Rate of climb (sea level) – 250 ft/sec
Operation ceiling – 17 km
Range – 3,540 km
G-limit – positive 6.5, negative 2.0
T-O run – 832 meters
Power Plant

Pratt & Whitney J-52-408 engine

**Weight** – 2,118 lb

**Thrust** – 11,200 lb

**Overspeed limit** – 12,400 rpm

**Ignition system** – Twin 20-joule start
Fuel Systems

- Total fuel capacity
  - Internal - 807 gallons
  - External - 1000 gallons
- Capability of carrying 150, 300 & 400-gallon tanks
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Configuration

- **Platform**

- **NATO compatible avionics will be tailored to customer requirements**
Aircraft External View

- Tail Pipe Extension
- Drag Chute
- 5 Hardpoints
- 30mm Cannons
- Arresting Hook
- Missionized Cockpit
- Air Refueling Probe
- Avionics Upper Bay
- Avionics Bay
Avionics

- TACAN
- Radar Altimeter
- IFF Interrogator
- Electric system - VSCF generator 20 KVA, emergency generator 1.7 KVA
- NATO Compatible Communication & Navigation Systems
- C/F Dispenser
Communication Systems

- U\VHF radio
- DF
Armament

- Aircraft max. armament weight - 3,720 kg.
- 5 external store pylons, carrying pods & bombs, rockets or missiles
- Two 30mm cannons
Armament

- AIM-9
- M-117/360 kg
- Pylons
- AAM-1/2/3
- AGM-45 Shrike
- MK-82
- MK-83
- MK-84

Legends:
- AIM-9: AAM-9
- M-117/360 kg: M-117
- AGM-45 Shrike: AGM-45
- MK-82
- MK-83
- MK-84
Optional Loading Configuration

More Configurations
**Optional Loading Configuration**

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*Note: \* indicates load.*

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**2.75" Rocket Launcher**

**Flare Dispenser**

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**Loading Configurations**
Loading Configurations

Optional Loading Configuration

I.M.1 250Kg FIRE BOMB
TYPE MK 5 MOD 1

- EXTERNAL TANK
- BOMB

STATION

1 2 3 4 5
Loading Configurations

RAFAEL 250Kg. 279 BOMBLET-CLUSTER BOMB TYPE TAL - 1

- O - EXTERNAL TANK
- BOMB

Optional Loading Configuration
Optional Loading Configuration
## Loading Configurations

### Optional Loading Configuration

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- **/swagger:** `EXTERNAL TANK`
- **/swagger:** `BOMB`
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IAF Improvements

- J52-P-408 Engine **11,200 lb Thrust** – The most powerful engine installed in A-4 A/C
- The only A-4’s that utilize **30mm Cannons** (considerably more lethal than the original 20mm guns)
IAF Improvements

Unique Tail Pipe Extension against IR missiles
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Maintenance

O level
- squadron level
- Aircraft launch & recovery, troubleshooting & corrective maintenance
- Daily/monthly inspections

I level
- Base level
- Aircraft & Line Replaceable Units (LRU’S) repairs
- Scheduled inspections

D level
- Highest level of maintenance
- Aircraft, LRU’S and Shop Replaceable Units (SRU’S)
- May be conducted by the IAI

IAF can support 240,000 spare parts line items
Summary

- A-4 is the best cost-effective solution for an advanced jet aircraft
- The team of Israeli MOD & IAF offers a comprehensive after sale package