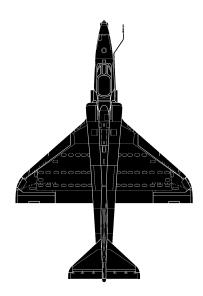
# **Airpower Classics**

**Artwork by Zaur Evlanbekov** 

## A-4 Skyhawk



All the performance at half the weight—that about summed up the A-4 Skyhawk, one of the finest jet aircraft ever to have served with the US Navy and Marine Corps. The Douglas delta-wing aircraft, ordered during the Korean War, first reached the Navy's carrier wings in 1956 and the Marine Corps in 1957. Within a few years, the A-4 was the mainstay of naval light attack missions in Vietnam.

The Skyhawk was chosen to replace the A-1 Skyraider. A 1950 Bureau of Aeronautics request called for an attack aircraft with a maximum weight of 30,000 pounds. Ed Heinemann, determined to reverse the prevailing trend toward heavier and heavier aircraft, created a radical design of simple structure and tight focus on weight control. His

XA4D-1 weighed in at under 15,000 pounds, loaded. Heinemann used a tailed-delta configuration and a tall landing gear (to permit clearance for external stores). The delta wing did not require folding, provided room for fuel, and allowed operation from small World War II-era carriers.

The A-4's small size and light weight translated into speed and power. Its basic design was reworked often to support missions—fast FAC, reconnaissance, buddy refueling, fighter training—other than attack. It stayed in production for 27 years, and continued in service with the Marine Corps until 1998 and the Navy until 2003. Several small nations still use them in front-line units.

-Walter J. Bovne



#### In Brief

Designed, built by Douglas  $\star$  first flight June 22, 1954  $\star$  crew of one or two  $\star$  number built 2,960  $\star$  one P&W J52-P-408A turbojet engine  $\star$  **Specific to A-4M:** max speed 670 mph  $\star$  cruise speed 465 mph  $\star$  max range 2,000 mi  $\star$  armament two 20 mm cannon and up to 9,000 lb ordnance  $\star$  weight (loaded) 24,500 lb  $\star$  span 27 ft 6 in  $\star$  length 40 ft 4 in  $\star$  height 15 ft.

#### Famous Fliers

Medal of Honor: Michael Estocin, James Stockdale (both USN). POW: Everett Alvarez Jr., John McCain (both USN). Navy Cross: James Busey IV, Bryan Compton, Edward Dickson, Trent Powers, Marvin Reynolds, Homer Smith (all USN). Test Pilots: Gordon Gray (USN), Robert Rahn. Notables: Randy Cunningham, Wynn Foster (both USN).

### **Interesting Facts**

Dropped first and last bombs of Vietnam War ★ suffered 380 aircraft losses (276 combat) and 47 POW losses in Vietnam ★ set 500 km closed-course speed record (695.163 mph) in 1955 ★ nicknamed Heinemann's Hot Rod after chief designer Ed Heinemann; also Scooter, Bantam Bomber, Tinker Toy, Mighty Mite, Camel, Skyhog, Vulture (Israel), Chickenhawk (Australia) ★ equipped with thermal cockpit shield for nuclear operations ★ carried special belly tanks designed to save airframe in a wheels-up landing ★ boasted roll rate of 720 degrees per second ★ saw combat with air forces of Kuwait, Israel, Argentina ★ used as stand-in for MiG-17 in dissimilar air combat training ★ featured in movie "Top Gun," 1986.



A Skyhawk powers up on a carrier deck.