

Douglas C-47 Skytrain

C-47 Skytrain



Role	Military transport aircraft
National origin	United States
Manufacturer	Douglas Aircraft Company
Designer	Douglas Aircraft
First flight	23 December 1941
Primary users	United States Army Air Forces Royal Air Force United States Navy See operators
Number built	>10,000
Developed from	Douglas DC-3
Variants	Douglas XCG-17 Douglas AC-47 Spooky

The **Douglas C-47 Skytrain** or **Dakota** is a military transport aircraft that was developed from the Douglas DC-3 airliner. It was used extensively by the Allies during World War II and remained in front line operations through the 1950s with a few remaining in operation to this day.

Design and development

The C-47 differed from the civilian DC-3 in numerous modifications that included being fitted with a cargo door and strengthened floor. During World War II, the armed forces of many countries used the C-47 and modified DC-3s for the transport of troops, cargo and wounded. The US Naval designation was R4D. Over 10,000 aircraft were produced in Long Beach and Santa Monica, California and Oklahoma City, Oklahoma. The Oklahoma City plant produced 5,354 C-47s from March 1943 until August 1945.



U.S. Army Pathfinders and USAAF flight crew prior to D-Day, June 1944, in front of a C-47 Skytrain

Operational history

The C-47 was vital to the success of many Allied campaigns, in particular those at Guadalcanal and in the jungles of New Guinea and Burma where the C-47 (and its naval version, the R4D) made it possible for Allied troops to counter the mobility of the light-traveling Japanese army. Additionally, C-47s were used to airlift supplies to the embattled American forces during the Battle of Bastogne. But possibly its most influential role in military aviation was flying "The Hump" from India into China. The expertise gained flying "The Hump" would later be used in the Berlin Airlift, in which the C-47 would play a major role, until being replaced by the C-54.

In Europe, the C-47 and a specialized paratroop variant, the **C-53 Skytrooper**, were used in vast numbers in the later stages of the war, particularly to tow gliders and drop paratroops. In the Pacific, with careful use of the island landing strips of the Pacific Ocean, C-47s were even used for ferrying soldiers serving in the Pacific theater back to the United States.

C-47s in British and Commonwealth service took the name **Dakota**, from the acronym "DACoTA" for *Douglas Aircraft Company Transport Aircraft*. The C-47 also earned the informal nickname *Gooney Bird* in the European theater of operations.

The USAF Strategic Air Command had C-47 Skytrains in service from 1946 through 1967.



C-47s unloading at Tempelhof Airport during Berlin Airlift.

Several C-47 variations were used in the Vietnam War by the United States Air Force, including three advanced electronic warfare variations which were sometimes called "Electric Gooneys" designated EC-47N, EC-47P, or EC-47Qs depending on the engine used. EC-47s were also operated by the Vietnamese, Laotian and Cambodian Air Forces. A gunship variation, utilizing three 7.62mm mini-guns, designated AC-47 "Spooky" often nicknamed "Puff the Magic Dragon" was also deployed.

After World War II thousands of surplus C-47s were converted to civil airline use, some remaining in operation in 2010.

MAPS C-47N – Serial Number 45-928



Douglas C-47B (Serial # 45-928) was manufactured by Douglas Aircraft in their Oklahoma City, Oklahoma plant. It was delivered to the U.S. Army Air Corps on 17 July 1945.

Over its career '928 traveled widely. It was initially assigned to Air Transport Command in Denver and remained with ATC until October 1946. During this period, it served with the 555th, 594th and 554th AAF base units at Love Army Airfield in Texas, Topeka, Kansas and Memphis, Tennessee respectively. While in Memphis, it was converted to C-47D configuration. The modification involved removing the superchargers from the engines.

In October of 1946, '938 was assigned to the 54th Reconnaissance (Very Long Range Weather) at Morrison Army Air Field in Florida. It served with this unit until June of 1948, when it was reassigned to Fairfield-Suisun Air Force Base in California.

The *Duck* remained at Fairfield-Suisun until February 1952, serving with the 1501st and the 1704th Air Transport Groups and the 1733rd Air Transport Squadron, all part of MATS (Military Air Transport Service). It departed sunny California in February of 1952 to serve with the 1701st Air Base Group at Great Falls Air Force Base in Montana.

Even colder climates were in '928's future when it departed Montana in May, 1952, for Elmendorf AFB in Anchorage, Alaska and the 1727th Support Squadron. It would remain at Elmendorf until May, 1954 (except for a brief reassignment to the 1726th Support Squadron at McCord AFB in Tacoma, Washington in June and July of 1953).

In May of 1954, '928 was moved to Miami, Florida for work, followed by reassignment to the 1707th Maintenance Squadron in Palm Beach, Florida in August. The *Duck* was reassigned to the 1100th Operations Group at Air Force Headquarters Command at Bolling AFB in Washington, DC. It remained there until July, 1961, at which time it was again reassigned to the 1001st Air Base Wing at Andrews AFB in Maryland.

In May of 1962, the *Duck* was retired to the boneyard at Davis-Monthan AFB in Arizona. However, it didn't stay there long. In June, it returned to Maryland to Fairchild Aircraft in Hagarstown. There it was refurbished prior to being dropped from the Air Force inventory and transferred to the Moroccan Air Force. The *Duck* stayed in service with the Moroccan Air Force until April 1978, when it entered the Civil Aviation rolls with Euroworld California, Inc. in April of 1978. Euroworld took possession in July of 1978. Its initial civil registration was N9853A, which was changed to N54599.

In September of 1980, ownership of '928 changed to Vision Air International. The Military Aircraft Restoration Corporation acquired the C-47 in October of 1984. During this time '928 was located at Exeter in Devonshire, England. The C-47 moved to several MARC locations including the 56th Fighter Group Restaurant at Republic Airport on Long Island, before being delivered to MAPS in September of 1991.

Variants

C-47

Initial military version of the DC-3 with seats for 27 troops, 965 built including 12 to the United States Navy as R4D-1.



Paratroop C-47, 12th Air Force Troop Carrier Wing. Invasion of southern France, 15 August 1944.

C-47A

C-47 with a 24-volt electrical system, 5,254 built including USN aircraft designated R4D-5.



An ex-USAAC C-47A Skytrain which was displayed at Cotswold Airport, Gloucestershire, England was recently purchased by Kermit Weeks and returned to the U.S. in August of 2011. This aircraft flew from a base in Devon, England, during the D-Day Normandy invasion and shows "invasion stripes" on the wings and fuselage.

RC-47A

C-47A equipped for photographic reconnaissance and Electronic Intelligence (ELINT) missions.

SC-47A

C-47A equipped for Search Air Rescue; redesignated HC-47A in 1962.

VC-47A

C-47A equipped for VIP transport role.

C-47B

Powered by R-1830-90 engines with superchargers and extra fuel capacity to cover the China-Burma-India routes, 3,364 built.



C-47B Skytrain -serial 43-49942

VC-47B

C-47B equipped for VIP transport role.

XC-47C

C-47 tested with Edo Model 78 floats for possible use as a seaplane.

C-47D

C-47B with superchargers removed after the war.

AC-47D

Gunship aircraft with three side-firing .30 in (7.62 mm) Mini-gun machine guns.

EC-47D

C-47D with equipment for the Airborne Early Warning role; prior to 1962 was designated AC-47D.

NC-47D

C-47D modified for test roles

RC-47D

C-47D equipped for photographic reconnaissance and ELINT missions.

SC-47D

C-47D equipped for Search Air Rescue; redesignated HC-47D in 1962.

VC-47D

C-47D equipped for VIP transport role.

C-47E

Modified cargo variant with space for 27–28 passengers or 18–24 litters.

C-47F

YC-129 re-designated, Super DC-3 prototype for evaluation by USAF later passed to USN as XR4D-8.

C-47L/M

C-47H/Js equipped for the support of American Legation United States Naval Attache (ALUSNA) and Military Assistance Advisory Group (MAAG) missions.

EC-47N/P/Q

C-47A and D aircraft modified for ELINT/ARDF (Airborne Radio Direction Finding) mission. N and P differ in radio bands covered, while Q replaces analog equipment found on the N and P with a digital suite, redesigned antenna equipment and uprated engines.

C-47R

One C-47M modified for high altitude work, specifically for missions in Ecuador.

C-47T

Designation applied to aircraft modified to a Basler BT-67 standard.



Aircraft of the 6th Special Operations Squadron including a C-47T in use by the US Air Force

C-47TP Turbo Dakota

Refit with modern turboprop engines and fuselage stretch for the South African Air Force.

R4D-1 Skytrain

USN/USMC version of the C-47.

R4D-5

C-47A variant 24-volt electrical system replacing the 12-volt of the C-47; redesignated C-47H in 1962, 238 transferred from USAF.

R4D-5L

R4D-5 for use in Antarctica. Redesignated LC-47H in 1962.

R4D-5Q

R4D-5 for use as special Electronic Countermeasures (ECM) trainer. Redesignated EC-47H in 1962.

R4D-5R

R4D-5 for use as a personnel transport for 21 passengers and as a trainer aircraft; redesignated TC-47H in 1962.

R4D-5S

R4D-5 for use as a special Anti-Submarine Warfare (ASW) trainer; redesignated SC-47H in 1962.

R4D-5Z

R4D-5 for use as a VIP transport; redesignated VC-47H in 1962.

R4D-6

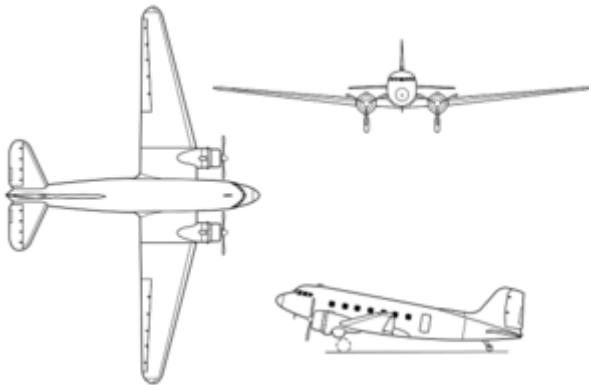
157 C-47Bs transferred to USN; redesignated C-47J in 1962.

R4D-6L, Q, R, S, and Z

Variants as the R4D-5 series; redesignated LC-47J, EC-47J, TC-47J, SC-47J, and VC-47J respectively in 1962.

R4D-7

44 TC-47Bs transferred from USAF for use as a navigational trainer; redesignated TC-47K in 1962.

General characteristics (C-47B-DK)

- **Crew:** 3
- **Capacity:** 28 troops
- **Payload:** 6,000 lb (2,700 kg)
- **Length:** 63 ft 9 in (19.43 m)
- **Wingspan:** 95 ft 6 in (29.41 m)
- **Height:** 17 ft 0 in (5.18 m)
- **Wing area:** 987 ft² (91.70 m²)
- **Empty weight:** 18,135 lb (8,226 kg)
- **Loaded weight:** 26,000 lb (11,793 kg)
- **Max takeoff weight:** 31,000 lb (14,061 kg)
- **Power plant:** 2 × Pratt & Whitney R-1830-90C Twin Wasp 14-cylinder radial engines, 1,200 hp (895 kW) each
Performance
- **Maximum speed:** 224 mph (195 kn, 360 km/h) at 10,000 ft (3,050 m)
- **Cruise speed:** 160 mph (139 kn, 257 km/h)
- **Range:** 1,600 mi (1,391 nmi, 2,575 km)
- **Ferry range:** 3,600 mi (3,130 nmi, 5,795 km)
- **Service ceiling:** 26,400 ft (8,045 m)
- **Climb to 10,000 ft (3,050 m):** 9.5 min.