U.S. Tandem Rotor Helicopter Evolution

CH-47 Chinook

CH-46 Sea Knight

CH-21 Shawnee

CH-25 Mule

Chinook – The Legacy of Tandem Rotor Helicopters

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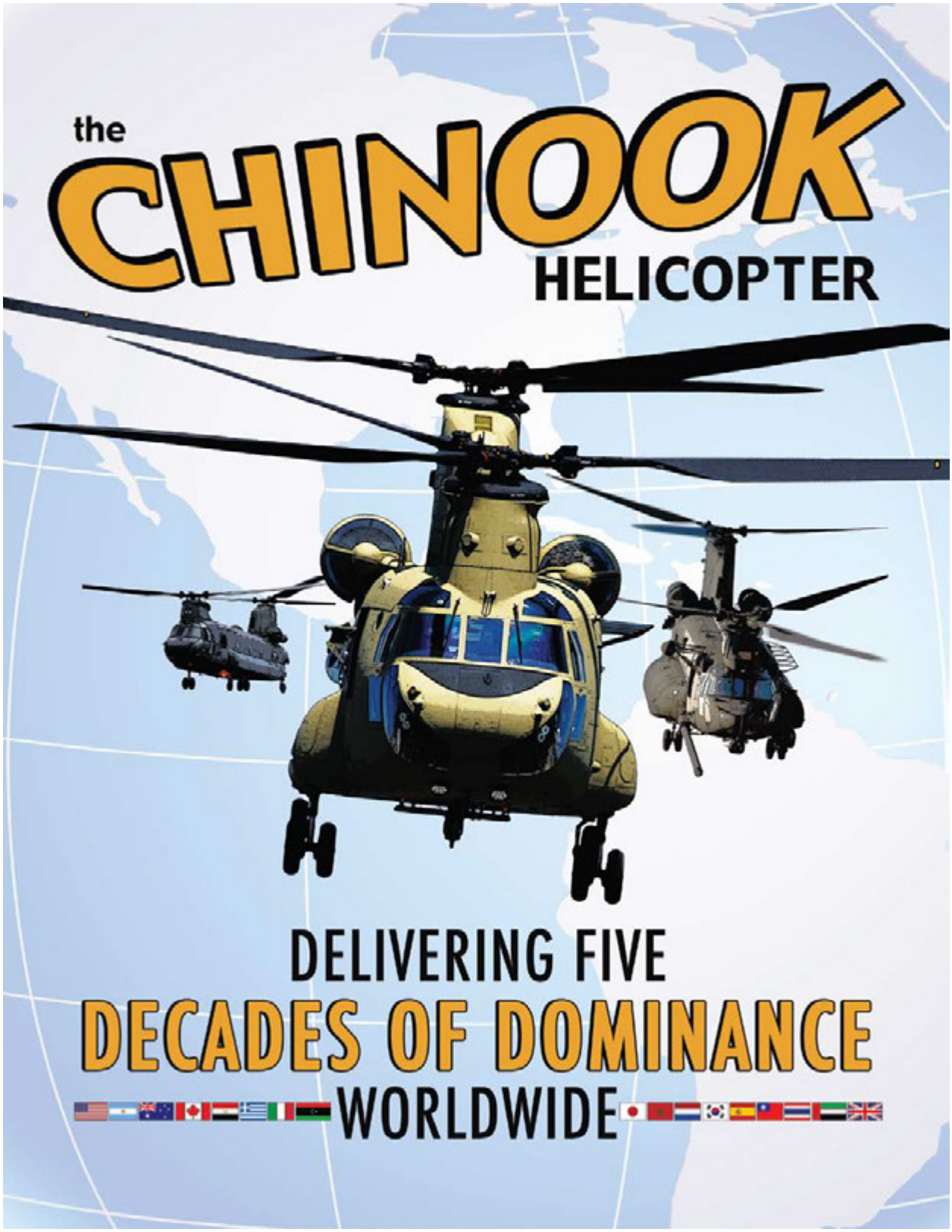
Cargo Helicopters Project Manager's Office
November 11, 2012


the
CHINOOK
HELICOPTER
DELIVERING FIVE
DECADES OF DOMINANCE
WORLDWIDE

legacy [**leg**-*uh*-see] (noun)
What something is remembered for or what has been left behind that is remembered, revered or has influenced current events and the present day.[i]

DEDICATION

The first flight of the CH-47 took place on 21 September 1961 - just 28 years after a tandem rotor helicopter flew for the first time. Over the past half-century, the history of the Chinook has been written by the courage and dedication of the aircrew, maintenance and support personnel that have operated the aircraft in war and peace. Credit must also go to Frank Piasecki for his pioneering work in the creation of tandem rotor helicopters and The Boeing Company for the design and manufacture of a timeless aircraft – the Chinook. The men and women who have flown and supported the Chinook deserve all the praise for what the aircraft has been able to provide to the troops in the field and to those in need. This history is dedicated to all those who have been privileged to have been part of the CH-47 community since that first flight just over fifty years ago.

INTRODUCTION

The history of the CH-47 has been documented many times by many people. This version is an attempt to compile inputs from as many sources as possible yet provide a compelling, single source of information on the history of tandem rotor helicopters and the development and use of the world's finest heavy-lift helicopter. It covers the early days of helicopter development and more than fifty-years of Chinook support to armed services worldwide as well as the civilian uses of the aircraft and some historical trivia. Where appropriate, the source of specific information or quotes will be provided in endnotes. Many of the hundreds of articles, books and websites used to draft this history often refer to each other and this makes the original source of information difficult to determine. When there is general agreement about a particular topic, the information presented will be a consensus from multiple sources. Photographs have been assembled from a variety of sources. One of the primary historical references is the 1989 Aerofax Minigraph *Boeing Helicopters CH-47 Chinook* by David Anderton and Jay Miller. Other invaluable resources are Mark Morgan's www.chinook-helicopter.com website *CH-47 Chinook Helicopter*, the www.aviastar.org website *All the World's Rotorcraft* as well as Wikipedia articles and unit histories. Boeing News released a 75th Anniversary booklet called *Boeing on the Delaware-A Heritage of Service* which has outstanding information on the early days of tandem helicopters. The Vietnam Helicopters Pilots Association's *Vietnam Helicopter History* and the Army Air Crews' website are absolutely essential sources of information regarding the Chinook in wartime. Donn Olsen, the G-8 CH-47 Distribution Manager, Tony Cruz from Boeing and Joe Baugher's web site have provided detailed tail number information on every aircraft which has been compiled into a separate database [part of which is at Appendix A] that was used for much of the disposition data in this document. Line drawings by Joe Sewell from *CH-47 Chinook in Action* by Wayne Mutza are used with permission and courtesy of Squadron/Signal Publications, Carrollton, TX. Thanks to Mark Marcus for his beautifully designed 50th anniversary posters and to all those professionals in the Cargo Helicopters PMO who took the time to review this information and provide suggestions and corrections.

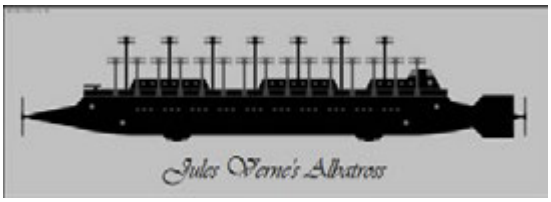
Nick Van Valkenburgh, Veteran's Day 2012, Redstone Arsenal, Alabama

Early Rotorcraft Development


DaVinci Helical Air Screw

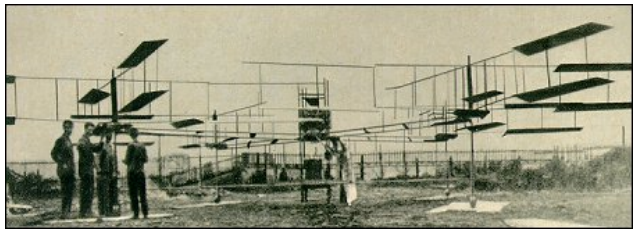
As early as 400BC, rotary wing concepts can be traced to Chinese writings describing wooden toys with a propeller probably inspired by the auto rotating seeds of trees like the maple or sycamore. In the late 15th century, Leonardo DaVinci's famous Helical Air Screw was an experimental design and his drawings show other designs as well. [It is interesting to note that a scale model built in modern times from the original DaVinci plans did not successfully raise itself in flight]. From that time on, many designs were developed but the lack of a suitable power source and an incomplete understanding of the nature of lift delayed construction of an actual flying model. At the end of the 19th century, the internal combustion engine provided the power source for early rotorcraft development.[ii]

Viscomte Gustave de Ponton d'Amecourt – 1863 [iii] [iv]



French aviation pioneer d'Amecourt is credited with coining the term "helicopteres" (after the Greek words *helix* (spiral) and *pteron* (wing)) in an 1863 monograph. Inspired by d'Amecourt's work, Jules Verne wrote a science-fiction novel published in 1886 called *Robur le conquerant* (Clipper of the Clouds) where the hero cruised the skies in a giant helicopter called the *Albatross*. D'Amecourt designed and built a steam powered coaxial rotary-wing model which did not fly but is still on exhibit in the French Aeronautical Museum.

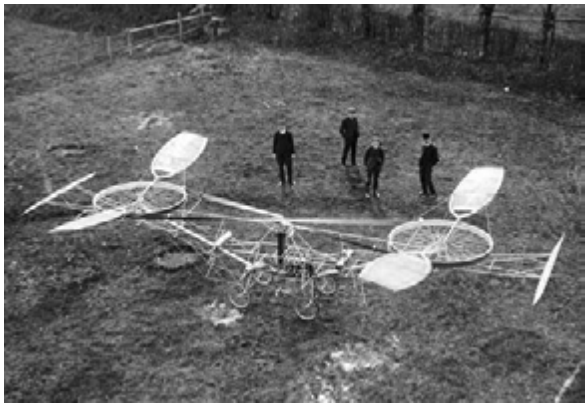
Breguet-Richet Gyroplane – 1907 [v] [vi] [vii]



The French brothers Jacques and Louis Breguet along with Professor Charles Richet are generally credited with developing the earliest successful rotary-wing aircraft which "flew" to the lofty elevation of about 2 ft on either 24 August or 29 September 1907 while being steadied by four assistants. The aircraft, Gyroplane No. 1, was actually an open frame device, with four-four blade rotors with one pair of diagonally opposed rotors rotating in a clockwise direction and the other pair moving anti-clockwise. It was neither controllable nor steerable but it was the first time that a rotary-wing device had lifted itself and a pilot into the air. Breguet and Richet followed with a second gyroplane design with two rotors and a fixed wing which successfully flew to an altitude of about 15ft but was wrecked on landing. Breguet later focused on fixed wing aircraft almost exclusively until the 1930's[viii] when the "Gyroplane Laboratoire" would arguably become the world's first successful helicopter. Louis Breguet would become one of the

most famous European aviators, airplane designers and industrialists who produced thousands of aircraft for Allied forces in WWI and founded the commercial airline, Air France.
Note: The term "gyroplane" (or gyrocopter or autogyro) was used to describe any rotary wing aircraft in the early days of aviation but technically an autogyro has a non-powered, free spinning rotor that turns due to the passage of air upwards and a separate propeller that provides forward thrust.[ix] *A helicopter uses engine driven rotor blades.*

Cornu Helicopter – 1907 [x] [xi] [xii]

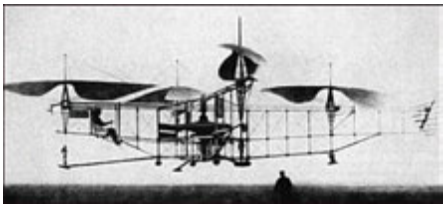


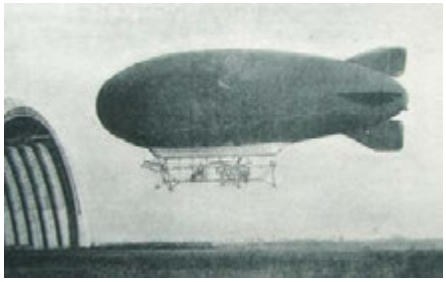
Like the Wright Brothers, Paul Cornu was a bicycle maker and engineer. A Frenchman, he designed and flew the first true rotary wing aircraft free of tie-down ropes on 13 November 1907. This aircraft had counter-rotating 20-foot tandem rotors and rose to about 1ft on its first 20-second flight. This first helicopter was not maneuverable and was abandoned after a few flights. Cornu continued to develop many technical concepts related to rotary-wing flight but did not produce any further aircraft.

Berliner-Williams Helicopter – 1908 [xiii]

The first helicopter built and flown in the United States was developed by Emile Berliner and built by John Newton Williams. It was a counter-rotating, co-axial test rig powered by a 36 horsepower engine. It is reported that it lifted Williams to a height of about 3 feet. Berliner went on to build other helicopters in the 1920s but none were ever put into production. The Berliner Helicopter No. 5 is now part of the Smithsonian Air and Space Museum collection and is on display at the Collage Park Air Museum in Maryland.

Etienne Oehmichen – 1921 [xiv]

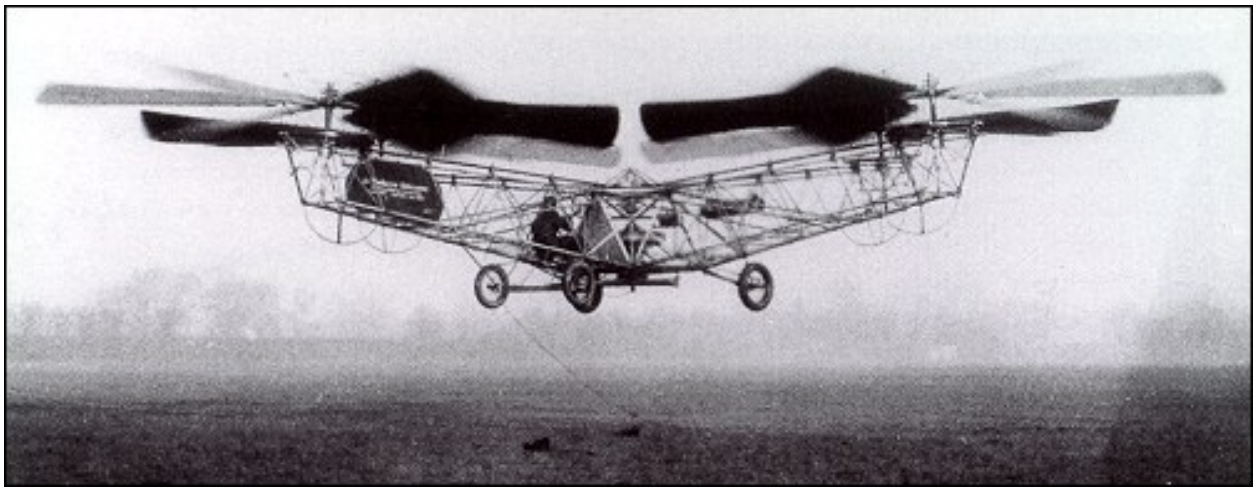


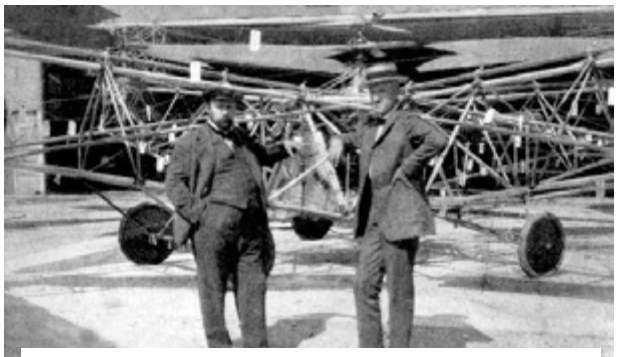


Another Frenchman, Etienne Oehmichen completed his first successful helicopter flight in 1921 and in 1922 developed an aircraft with small vertically mounted rotors and large horizontal rotors. The smaller rotors led to the later development of the tail rotor. In May 1924, he was the first to fly a circular course of about one kilometer. He also experimented with his helicopter design attached to a blimp called "Helicosta" for additional lift. Oehmichen was also a biologist specializing in the function of insect wings, particularly dragonflies, which led to further research in the construction of flexible rotor blades.

Early Rotorcraft Development

De Bothezat Helicopter – First Army Helicopter – 1922 [xv] [xvi]

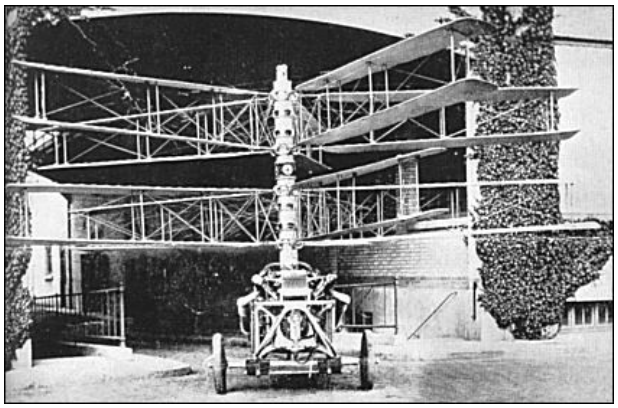




George De Bothezat with COL Thurman Bane

Dr. George de Bothezat was a university professor who fled the Russian Revolution, came to the United States as a scientist and mathematician and wrote one of the first scientific papers on the aerodynamics of rotary wing flight. In 1921, he received a classified contract from the Army to design and construct an experimental helicopter. De Bothezat and his assistant, Ivan Jerome, built the "Flying Octopus" at McCook field in Dayton, Ohio. It had four six-bladed 20' rotors at each end of a cross shaped truss and two small steering propellers (which were later removed). Each rotor had variable pitch blades which provided individual collective control. There was an additional small rotor over the engine which provided some amount of lift but was designed to cool the 180hp engine. The Army's first helicopter flight took place on 18 December 1922 with COL Thurman Bane at the controls. The flight lasted less than two minutes and achieved an altitude of six feet. More than a hundred subsequent flights were made over the next two years. With a more powerful engine, the helicopter proved to be very stable but required a favorable wind to achieve forward flight and never reached an altitude of more than about 30 feet. After spending nearly $200,000 on the aircraft (quite a sum at that time), the Army cancelled the project because the helicopter was "underpowered, unresponsive, mechanically complex and had pilot workload that was too high".

Pescara Helicopter No. 3 – 1924 [xvii]

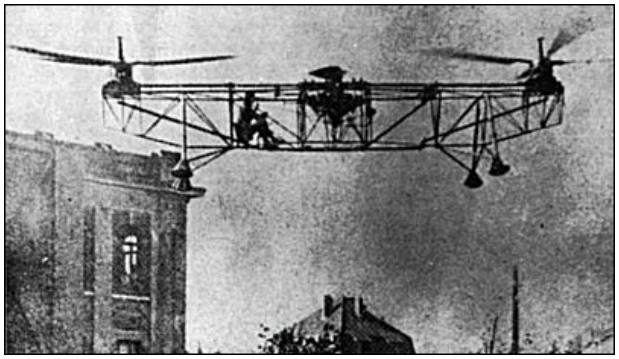


Raul Pateras Pescara was an Argentinian lawyer and inventor who specialized in seaplanes and helicopters. He even worked with Gustave Eiffel (yes, that Eiffel) on wind tunnel research. Pescara built coaxial helicopters starting in 1919 and on 18 April 1924, he set a new world record of covering one-half mile in four minutes at an "altitude" of about 6 feet. His helicopter used a co-axial rotor system, each with twin rotors with four pairs of blades arranged like a biplane's wings. The pitch of the 16 lifting surfaces could be altered in flight by warping them. Pescara's No. 3 machine was the first credible use of cyclic and collective pitch control and the rotor hub could be tilted slightly to achieve a forward airspeed of about 8mph. His helicopter also was the first to demonstrate autorotation as a way of recovering from engine failure.

Brennan Helicopter – 1924 [xviii]

In England, Louis Brennan experimented with a large (59ft) single rotor helicopter from 1919 to 1926. Propellers were mounted at the tip of the rotor to provide tourqueless rotation. Free flights were conducted in May 1924 but stability and control were poor and the maximum altitude achieved was only about 7 feet. The helicopter crashed in 1926.

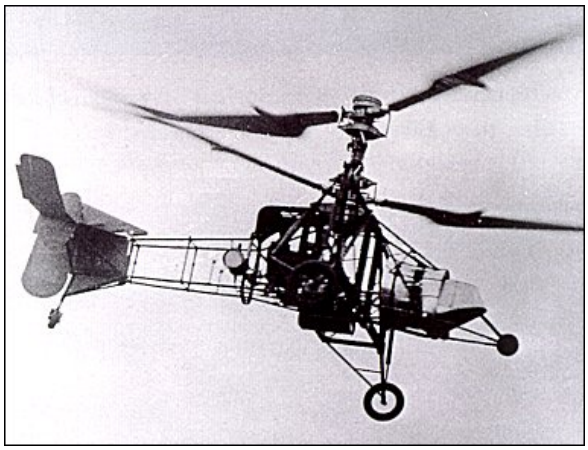
Florine Helicopter – 1926 [xix] [xx]



It was not until April 1933 that the first twin tandem rotor aircraft actually flew. Nicolas Florine, a Russian-born engineer living in Belgium, designed and flew a tandem rotor aircraft which had co-rotating rotors that did not counter-rotate but were tilted slightly in opposite directions to counter torque. In October, 1933, Florine achieved an unofficial world flight record for helicopters of just under 10 minutes at an altitude of about 15ft. Florine's designs suffered setbacks and work was discontinued into the pre-WWII years and his machines were destroyed during the war.

Early Rotorcraft Development

Breguet-Dorand Gyroplane Laboratoire – 1933 [xxi] [xxii]



The Breguet Gyroplane first flew in 1933 but was heavily damaged during testing and resumed flights in June of 1935. The aircraft used a pair of co-axial, counter-rotating, 2 blade metal rotors whose blades had an airfoil section. One rotor shaft turned inside the other, each rotor cancelling out the torque created by the other. For the first time, cyclic pitch control for lateral and longitudinal movement and collective pitch for movement in the vertical plane were used. By the end of tests in 1936, it had remained in the air for more than one hour and it demonstrated good controllability and even an engine-off landing using auto-rotation. The single prototype continued experimental work up to the start of WWII but was destroyed during the war.

Focke-Wulf Fw 61 – 1936 [xxiii] [xxiv] [xxv] [xxvi]

Focke-Wulf Fw 61

Focke-Achgelis Fa 223

The Fw-61 made its first flight lasting 28 seconds on 26 June 1936. The Fw 61, designed by Professor Heinrich Focke, was a Fw 44 trainer fuselage that had a single, radial engine which drove twin, counter rotating blades mounted laterally on outriggers to the left and right of the fuselage. The small propeller on the engine provided airflow to cool the engine during low speed or hover. The Fw 61 set a number of world records in 1937-39 for altitude (over 11,000ft), distance flown (143mi) and speed (76mph). According to one source, "the helicopter could be flown by any pilot after a one hour briefing." Ms. Hanna Reitsch, a noted female pilot of the day flew Fw 61 demonstrations *inside* the large Deutschlandhalle indoor sports stadium in Berlin every evening during February 1938. Only two Fw 61/Fa 61 prototypes were built but Focke formed a new company, Focke-Achgelis (hence the new designation Fa 61) which went on to develop the Fa 223 *Drache* (Dragon), the first production helicopter and Fa 266 transport helicopters. Only 20 of the Fa 223 aircraft were built. One of the later versions of the Fa 223 (v14) was captured by the British and became the first helicopter to fly across the English Channel on 6 September 1945 when it was flown to England for testing at RAF Beaulieu.

Early Rotorcraft Development

Single Rotor Design – VS-300 and R-4 – 1939 [xxvii] [xxviii]


Sikorsky VS-300

Although Focke-Achgelis and Breguet-Dorland demonstrated the earliest helicopter flights in the late 1930's, they were still prototype lateral and co-axial twin-rotor machines that never led to a production aircraft. In the United States, a Russian immigrant named Igor Sikorsky would pioneer the development and production of what came to be considered the "standard" helicopter configuration – a main rotor and a tail rotor for anti-torque. Prior to his helicopter work, he was responsible as the founder of Sikorsky Aircraft Corporation for the development of the first Pan American flying boats. In the late 1930's, Sikorsky was the Engineering Manager of the Vought-Sikorsky division of United Aircraft Corporation and designed and built the VS-300 which made its first tethered flight on 14 September 1939. The VS-300 introduced the concept of a single engine to power both the main and tail rotor and by May of 1941 surpassed the world endurance record held by the Fa 61 by staying aloft for one hr and 32 min. In the meantime, Sikorsky was working on the world's first production helicopter, the R-4 "Hoverfly", which would become the only U.S. military helicopter to be used operationally in WWII. Sikorsky's pioneering single rotor configuration would become the most widely used helicopter design to this day.


Sikorsky R-4

Single Rotor Design – R-5 and R-6 - 1943

The first Sikorsky R-5 "Horse" prototype flew in August 1943. It carried a crew of 1 and 1 passenger. It was followed in 1946 by the slightly larger (four seat) S-51 model as the first commercial helicopter built by Sikorsky. The aircraft was also produced by Westland Aircraft under license in Great Britain as the WS-51 Dragonfly.

Sikorsky R-5

The Sikorsky R-6 prototype first flew in October of 1943 and was a refined version of the R-4. The two-seat production aircraft were delivered in 1946 and formed the first helicopter squadron in the Navy. After some engine difficulties, the R-6 "Hoverfly II" was gradually replaced by the more reliable R-5/R-51.

Sikorsky R-6

Early Rotorcraft Development

Dual Rotor Design - Havilland Platt and Laurence LePage XR-1

1941 xxix **xxx**

In 1938, Haviland Platt and Laurence LePage formed the Platt-LePage Aircraft Company. LaPage traveled to Germany to meet with the Focke-Wulf designers of the Fw 61 but broke off talks as the relationship between the US and Germany deteriorated. Platt-LePage proceeded to design their own lateral rotor helicopter in response to the U.S. Air Corps competition for Rotary Wing Aircraft with a layout quite similar to the Fw-61.(Platt also had witnessed Hannah Reitch's demonstration flights of the Fw 61 in Germany). Competing with Sikorsky's single rotor design, Platt-LePage's XR-1 won the contract in July 1940 and had its first flight in May of 1941. The XR-1 was a two seat aircraft. It had a single 450hp engine and transmitted power to the rotors with a transmission that included a differential similar to that in a car. A young engineer on the Platt/LePage project criticized this design and after a crash landing due to a failure of the differential, the engineer resigned. His name was Frank Piasecki. The XR-1 was repaired and continued flying trials. In 1943, the aircraft crashed again. A second prototype, XR-1A, was built and resumed flying qualification trials in 1943 but crashed in October 1944 and was scrapped. Meanwhile, the original XR-1 was rebuilt and resumed flying trials but continued to have flight control problems. After years of test flights, the Air Corps eventually cancelled the contract with Platt-Lepage at the end of WWII. The XR-1A was purchased as scrap and rebuilt and later purchased by Frank Piasecki who grounded the aircraft but used the airframe in a planned tilt-rotor project. The XR-1 was donated to the Smithsonian Air and Space Museum where it is currently stored in "remarkable condition" at the Paul Garber Restoration and Storage Facility at Suitland, Maryland. The aircraft will eventually be moved to the new Steven F. Udvar-Hazy Center near Washington Dulles International Airport.

The Early, Single Rotor Days of Frank Piasecki [xxxi] [xxxii] [xxxiii] [xxxiv] [xxxv]

While Sikorsky's single-rotor helicopters were successful in their limited military service in WWII, they were restricted in payload and had serious center-of-gravity limits. A twin-rotor system could solve these problems but the lateral-rotor configuration of the Platt-LePage XR-1 had significant control problems. Frank Piasecki was on the Platt-LePage XR-1 team and gained significant insight into the design issues. He noticed that the XR-1 seemed to perform better when flying sideways and realized that if he eliminated the outriggers supporting the rotors, the helicopter could carry a larger payload. Just as Igor Sikorsky was the pioneer in single-rotor helicopter design, Frank Piasecki was largely responsible for the tandem, twin-rotor helicopter that eventually led to the Chinook but he got his start with single-rotors.

Piasecki PV-1 Design

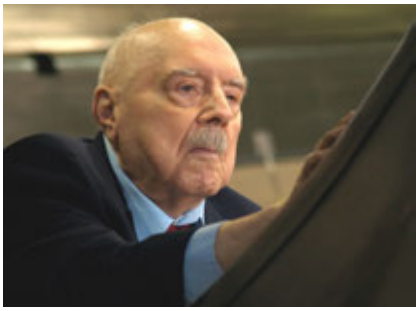
At the age of 21, Piasecki and classmate from the University of Pennsylvania, Howard Venzie formed the PV Engineering Forum in 1940. Their first helicopter design, PV-1, was far ahead of its time – a single rotor, ducted fan, no tail rotor (NOTAR) design to demonstrate a unique anti-torque system. The aircraft was not built because the technology (namely turbine engines) wasn't available to support the design. Their second design, PV-2, was a conventional single-rotor/tail rotor single seat helicopter that first flew on 11 April 1943. "It included a new Franklin aircraft engine, a fuselage from an old single-place Curtiss-Wright pusher plane, a main clutch from a Studebaker, an oil scavenge pump from a Packard, an oil cooler made of an automobile heater radiator, a wing tank from a Piper Cub and the right angle drive from an Evinrude outboard motor. To save weight of a starting system, Forum members rigged the engine to start with a pull rope, much like a lawn mower."[xxxvi] Although the design of the PV-2 attempted to incorporate existing equipment, there was still a need for some original construction. "Each [rotor] blade was fashioned around a steel tube with spruce beams bonded to the fore and aft faces. The leading edge was formed by running a jack plane ground to the proper shape along the length of wood. The aft blade was constructed by gluing bass ribs to the aft surface of spruce and covering them with a spruce and plywood trailing edge. Thin birch plywood was then glued across the spar to fair the leading and trailing edges together, and finally all was covered with a light fabric known as balloon cloth, then doped"[xxxvii]. The PV-2 incorporated full cyclic rotor control and dynamically balanced blades and was the second successful helicopter (after the Sikorsky R-4) to fly in the US. Piasecki was the test pilot, who taught himself to fly the PV-2 with only 14 hours of previous flying time in a fixed wing aircraft.[xxxviii] The successful demonstrations of the PV-2 allowed Piasecki to approach the US Navy with a proposal for a large tandem-rotor helicopter, the PV-3. Frank Piasecki was 24 years old[xxxix].

Piasecki PV-2

Early Rotorcraft Development

FRANK NICHOLAS PIASECKI (1919-2008)[xl] [xli] [xlii] [xliii] [xliv] [xlv] [xlvi]

Frank Piasecki was one of the original pioneers of the US helicopter industry and the father of the tandem helicopter design. “He's the father of Boeing Rotorcraft. We would not be where we are without his mind and entrepreneurial skills," said J. Patrick Donnelly, Boeing's director of advanced rotorcraft in an October 2007 interview. Piasekcki was born in Lansdowne, Pennsylvania on 24 October, 1919, the only son of Polish immigrants Nikodem and Emilia Piasecki. He graduated from Overbrook High School in Philadelphia, studied mechanical engineering at the University of Pennsylvania and received his BS degree in Aeronautical Engineering from the Guggenheim School of Aeronautics of New York University in 1940 at the age of 21. That same year, along with other young engineers from the University of Pennsylvania, he founded the design firm PV Engineering Forum. [The V in PV was Harold Venzie, Piasecki’s former classmate at the University of Pennsylvania.] Piasecki kept his first company name vague “because if you used the word ‘helicopter’, people thought you were nuts.” He also worked as a designer for Platt-LePage Aircraft Corporation and later as an aero dynamist for Edward G. Budd Manufacturing Company. After successfully developing the PV-2 helicopter, he actively promoted it by flying demonstrations and even landing it at a gas station and telling the attendant to “fill ‘er up and don’t forget to clean the windshield”. At PV Engineering Forum, he designed and built the world’s first tandem rotor helicopter, the XHRP-1 in 1945. In 1946, the company was renamed Piasecki Helicopter Corporation and continued development of tandem rotor systems with the HUP, H-21 and H-16 – the first twin turbine helicopter. He was the holder of the first helicopters pilot’s license in the US. In 1956, after a bitter dispute with the Board of Directors and major investors Laurence Rockefeller and Felix Dupont, Jr, Piasecki resigned as the chairman. Piasecki Helicopter became Vertol Aircraft Corporation which was sold to Boeing in 1960 and became Boeing Vertol and eventually Boeing Rotorcraft Systems. Piasecki and his original founders formed the Piasecki Aircraft Corporation in Essington, Pennsylvania to continue research work on advanced VTOL aircraft technologies such as Vectored Thrust Ducted Propeller (VTDP). During his 67 year career, Frank Piasecki was awarded 24 patents as well as being honored with the National Medal of Technology, the Smithsonian National Air and Space Museum Lifetime Achievement Award and membership in the National Aviation Hall of Fame. He was an accomplished violinist and gifted amateur photographer. Frank Nicholas Piasecki died at his home in Haverford, Pennsylvania on 11 February 2008. He is survived by his wife, Vivian and seven children. His son John is the current President and CEO of Piasecki Aviation Corporation.



Dual-rotor Helicopters [xlvii] [xlviii]

The physical differences between single and dual-rotor helicopters are obvious. On a single rotor system, the tail rotor is added to counteract the torque of the single main rotor. Dual rotors are counter-rotating and do not require a separate rotor to counterbalance torque and therefore, all power is available for lift. (Tail rotors consume up to 15% of available power on single main rotor helicopters). There are four types of counter rotating, dual-rotor helicopters – tandem, coaxial, intermeshing and transverse (or lateral).

Coaxial rotors are rotors mounted one above the other on the same shaft and turning in opposite directions. Example: Kamov Ka-27 Helix.

Intermeshing rotors are a set of two rotors turning in opposite direction with each rotor mast mounted on the helicopter on a slight angle to the other. Example: Kaman HH-43 Huskie.

Transverse or lateral rotors are mounted on the ends of wings or outriggers, perpendicular to the body of the aircraft. This configuration is found on the first viable helicopter, the Focke-Wulf Fw 61 as well as the V-22 Osprey.

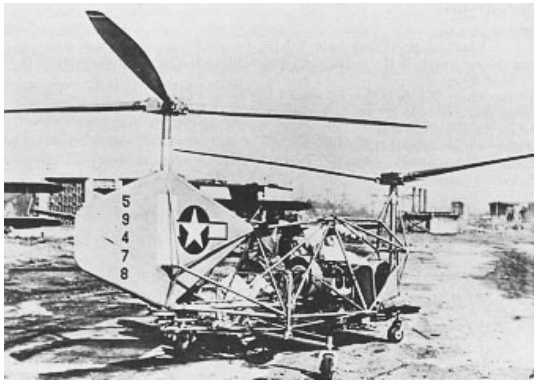
Tandem rotors are mounted one behind the other and all rotor power contributes to lift. This configuration improves hovering precision and permits takeoffs and landings regardless of wind direction and rear ramp access on any terrain: Example: CH-47.

Most dual-rotor helicopters are tandem rotor systems. One of the big advantages of the tandem rotor system is the much larger center of gravity range and lack of an anti-torque rotor which means that all engine power can be applied to lift. The major disadvantage is a more complex transmission system and control system. Control systems achieve yaw by applying opposite left and right cyclic to each rotor, essentially pulling both ends of the aircraft in opposite directions. Pitch is accomplished by applying opposite collective to each rotor, effectively tilting the aircraft forward or back. Tandem rotor helicopters use the term “thrust control” to describe the collective pitch control (which is used in the same way any other collective). Using lateral cyclic and pedal input, both rotor systems are tilted to one side, allowing the aircraft to fly sideways. Tilting only one rotor system allows the aircraft to pivot around its nose (or tail).Tilting each rotor system in opposite directions allows the aircraft to pivot around the center of the aircraft. Tandem rotor helicopters operated in forward flight by using differential collective pitch – increasing pitch in the aft rotor system more than the forward system. Hovering is accomplished by matching pitch between the two counter-rotating rotor systems.

Development of Tandem Rotor Helicopters

Rotorcraft XR-11 "Dragonfly" – 1947 [xlix]

The XR-11 was a two-seat tandem rotor helicopter built in 1947 for the US Army Air Corps by the Rotorcraft Corporation in Glendale, California. It was powered by a 100hp engine and is the only tandem rotor helicopter to have flown with rigid blades. It was later designated XH-11 and the project was cancelled.



McCullock MC-4/YH-30/Jovair 4E – 1951 [l]

The MC-4 was the first tandem-rotor helicopter to be certificated for commercial use in the US. Development was started in 1946 on the JOV-3 by the Helicopter Engineering and Research Corporation headed by Drago Jovanovich and F. Koslowski who were formerly with the Piasecki Company. Jovanovich and Koslowski moved to the McCulloch Motors Corporation in 1949 and continued development of the prototype MC-4 which flew for the first time in 1951. They built similar YH-30's and XHUM-1's for evaluation by the US Army and Navy but no orders were received because the helicopters were considered to be underpowered and the aircraft were surplused in 1953. Jovanovich formed his own company, Jovair Corporation, and developed a 4 seat version known as the Sedan 4E which received type approval from the FAA in 1963. A turbocharged version and an agricultural version were also built.

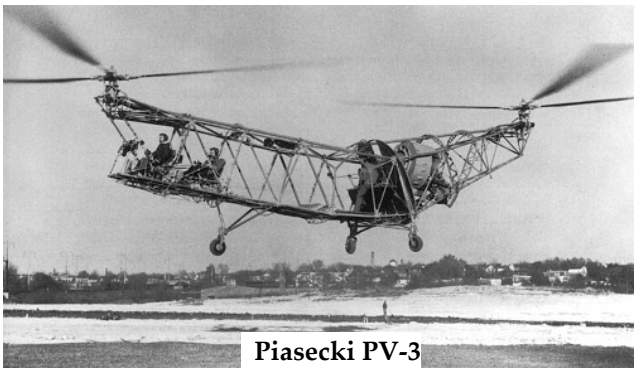
MC-4

YH-30

Jovair Sedan 4E

Development of Tandem Rotor Helicopters

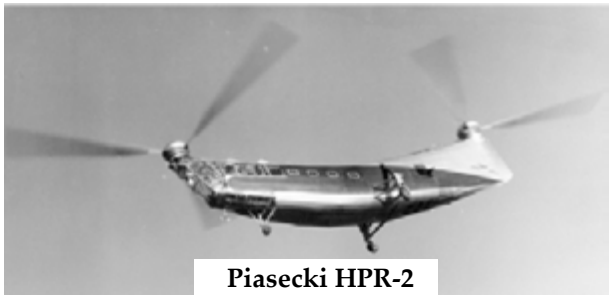
Piasecki PV-3/HRP-1/HRP-2 "Rescuer" ("Harp") – 1945 [li] [lii] [liii]



Piasecki PV-3

Following the successful demonstration of the PV-2, PV Engineering Forum was awarded a development contract in January 1944 for a completely new design of helicopter for the US Navy which had a basic requirement to carry an 1800 pound payload. The prototype aircraft, PV-3, was at that time, the world's largest helicopter, with room for 8 passengers and two crew. This "Dogship" (dogs were often used as guinea pigs in testing aircraft), incorporated lessons learned from the PV-2 as well as Piasecki's experience with the XR-1 program. The tandem configuration was not universally accepted but Piasecki's design which raised the aft rotor above the plane of the forward rotor eliminated anticipated destabilizing downwash from the forward to aft rotor systems. The Navy designated PV-3, which remained a company prototype, flew for the first time on 7 March 1945 and was powered by a 600hp Pratt & Whitney engine. Two refined prototype versions were produced in 1946 and designated XHRP-1 and by mid 1947, production began on a total production of 38 HRP-1 (Marine Corps, Navy and Coast Guard) "Rescuer" (aka Harp) helicopters which could carry 8 passengers or 2000 lbs of cargo. HRP-1s served through the mid 1950's. Its distinctive shape quickly earned the nickname "Flying Banana" which carried over to all the subsequent Piasecki tandem designs. An improved version with all metal skin was developed as the HRP-2 and five were delivered to the Coast Guard in 1948.

Piasecki HRP-1



Piasecki HPR-2

Specifications [HRP-1] [liv]
Crew: 2
Capacity: 8 passengers or 2000 lbs of cargo
Engine: P&W R-1340 – 600hp
Length: 48ft
Main Rotor Diameter: 41ft
Height: 14 ft 10 in
Weight Empty: 5,041 lb
Loaded Weight: 6,900
Max Speed: 103mph
Cruising Speed: 86mph
Ceiling with normal load: 10,400ft

Variants [Number Produced]
PV-3 – Prototype [1]
XHRP-1 – two additional PV-3 prototypes [2]
HRP-1 – Production articles [35]
HRP-1G – Coast Guard variant [3]
HRP-2 – Metal skinned [5

Development of Tandem Rotor Helicopters

Piasecki XHJP-1/ HUP-1/2/3/4/H-25 "Retriever" ("Mule") – 1949

lv lvi

Piasecki HUP-1

In 1945, the Navy issued requirements for a compact utility/rescue helicopter to operate from aircraft carriers, battleships and cruisers. Piasecki's XHJP-1 tandem design won in a side-by-side flight mission evaluation and became the HUP-1 in production. The HUP was the first helicopter to perform a loop (unintentionally) during a demonstration flight. It carried a crew of two and four-five passengers or three litter patients. A total of 269 HUPs and 70 Army H-25A "Mules" were delivered by the end of production in July 1954. HUP-1 was the original Navy designation and subsequent upgrades were initially called HUP-2, 2S and 3 which were later designated as H-25B and H-25C in 1962. The Army transferred 50 of its H-25As back to the Navy in 1955 and the balance of the Mules were withdrawn from Army service in 1958. The Navy and Marine Corps continued to fly the aircraft until 1964.

Piasecki H-25

Specifications [HUP-1]
Crew: 2
Capacity: 4 passengers
Engine: Continental R975-42 – 550hp
Length: 56ft 11in
Main Rotor Diameter: 35ft
Height: 12 ft 6 in
Weight Empty: 4,100lb
Loaded Weight: 5,750lb
Max Takeoff Weight: 6,100lb
Max Speed: 108mph
Cruising Speed: 84mph
Ceiling with normal load: 10,200ft

Variants [number produced][lvii]
XHJP-1 (PV-14) – Initial prototype [1]
XHUP-1 – First two prototypes [2]
HUP-1 – First Production Model - 525hp engine [26]
HUP-2 – Improved Version – 550hp engine and autopilot [later designated H-25B] [193]
HUP-2S – Anti-submarine warfare version, modified with dunking sonar [included in HUP-2]
HUP-3 – Utility transport for US Navy – 550hp engine [later designated H-25C] [50]
H-25 Mule – Army transport with strengthened floors, large doors and power-boosted controls. [70]

Development of Tandem Rotor Helicopters

Piasecki PD-22/H-21 "Workhorse"/"Shawnee" – 1952 [lviii] [lix] [lx] [lxi]

The H-21 was originally developed by Piasecki as an Arctic rescue helicopter for the US Air Force using the configuration of the HRP-2. It first flew in April 1952. The Air Force initially ordered 32 H-21A Search and Rescue aircraft and 163 of the more powerful H-21B transport versions. The Air Force H-21A and B helicopters were called "Workhorse" but were commonly referred to as "Flying Bananas". The US Army ordered the H-21C and called it the "Shawnee" in keeping with the naming of helicopters after Native American tribes. The H-21C had a sling load capability of 4,000lb. In 1953, the Air Force set two world records in the H-21 – 146.7mph and 22,110 feet altitude and in 1956, an Army H-21C made the first non-stop transcontinental flight across the US with in-flight refueling from a US Army U-1 Otter. The flight took 37 hours. A total of 707 H-21s were produced between 1954 and 1959 including 150 for use by West Germany, Canada, France, Sweden and Japan. Production by Boeing Vertol ended in 1956.

Piasecki H-21A

CH-21A and UH-1


CH-21 Shawnees arriving in Vietnam


H-21 Presidential Aircraft

32 US Army CH-21s were first deployed to Vietnam on the USNS *Core* on 11 December 1961 with the 8th and 57th Transportation Companies[lxii]. The CH-21 was the test aircraft for many new helicopter operations in combat and became the Army's prime troop transport. On 2 January 1962, Army CH-21 Shawnees airlifted 1000 Republic of Vietnam (RVN) troops in one of the first airmobile operations in Army Aviation. From the initial thirty-two CH-21 Shawnees, three more companies were added for a total of 130 aircraft in country. Originally unarmed and unarmored, the CH-21 aircraft added armor and 7.62mm or 50cal machine guns for self defense. The shooting down of a CH-21C [56-02084] Shawnee in Kontum Province near the Laotian-Vietnamese border on July 15, 1962 resulted in the first Army casualties of the Vietnam War. Another 13 aircraft would be lost by the time the underpowered, twin-piston-engine Shawnees were replaced in 1964 with the turbine-powered UH-1 "Hueys" as troop transports. Shawnee crews and their counterparts in the Hueys were the pioneers for the development of air assault tactics in the Vietnam War. The veteran aircraft did not receive the proper credit for its role in the development of the air mobility concept. By late 1965, most CH-21 helicopters were withdrawn from the active Army and Air Force inventory.

Development of Tandem Rotor Helicopters

CH-21 in Vietnam [Copyrighted Photo by Hans Halberstadt]

Specifications [CH-21C]

Crew: 3-5
Capacity: 20 troops or 12 litters
Length: 52ft 6in
Height: 15 ft 9 in
Max Takeoff Weight: 15,200lb
Cruising Speed: 101mph
Weight Empty: 4,100lb
Engine: Wright R-1820 -1425hp
Main Rotor Diameter: 44ft
Loaded Weight: 15,200
Max Speed: 125mph
Ceiling with normal load: 7,750ft

Variants [number produced]

XH-21 – first prototype [1]
YH-21 Workhorse – USAF SAF version [18]
H-21A Workhorse – same as YH-21 with 1250hp engine – redesignated CH-21A in 1962 [38]
H-21B Workhorse – same as H-21A with 1425hp engine – redesignated CH-21B in 1962 [183]
SH-21B Workhorse – rescue conversion of H-21B – redesignated HH-21B in 1962
H-21C Shawnee – US Army version of H-21B – redesignated CH-21C in 1962 [464]
XH-21D Shawnee – Two H-21Cs with turbine engines – one with two GE T58 turboshaft engines married to a common transfer case and another with two T-53 engines. The T-53 variant became the basis for the design of the Vertol 107 (CH-46).
Model 42A – Civilian conversion of eight RCAF H-21s for civilian use
Model 44A – 19 Passenger commercial version for Swedish Air Force [9] and Swedish Navy [2] and test aircraft for Japan Self Defense Forces
Model 44B - 15 passenger commercial version
Model 44C – 8 passenger executive version

Development of Tandem Rotor Helicopters

Piasecki PV-15/ YH-16/ YH-16A "Transporter" - 1953 [lxiii] [lxiv] [lxv]

YH-16 with H-21 hovering in background and HUP in foreground

Development of the YH-16 was initiated by Piasecki in response to an Air Force requirement for a long range Rescue helicopter to pick up bomber crews. First flight was on 23 October, 1953 and it was the largest helicopter in the world at that time. With a rotor diameter of 82 feet and a fuselage equal in size to a DC-4 transport aircraft, it could carry 40 passengers or 14,000lbs of cargo. A tall landing gear version was planned to allow detachable pods or external loads. The YH-16 was powered by two Pratt & Whitney R2180 engines and the second prototype (YH-16A) was equipped with two Allison T-38 turbo shaft engines and set an unofficial world speed record of 167mph. A third design, the 69-passenger YH-16B, was planned to be built with two Allison T-56 turbo shaft engines but the crash of the YH-16A on a test flight in December 1955 led to the cancellation of the entire program.

Specifications [YH-16A]
Crew: 3
Capacity: 40 troops or 32 litters
Engine: Allison YT-38 - 1800hp each
Length: 78ft
Main Rotor Diameter: 82ft
Height: 25ft
Weight Empty: 22,506lb
Max Takeoff Weight: 33,577lb
Max Speed: 146mph
Ceiling with normal load: 19,100ft
Cruising Speed: 140mph

Variants [number produced]
YH-16 – prototype with reciprocating engines [1] 50-01269
YH-16A – prototype with turbine engines [1] 50-01270
YH-16B - proposed conversion of the YH-16 with turbine engines – not built

Development of Tandem Rotor Helicopters

Vertol 107 & 114- 1958 [lxvi]


Vertol YHC-1

The Korean War proved the utility and versatility of the helicopter but by the mid-1950s, the limits of reciprocating engine helicopters were being felt by all the services. The shift to turbine engine technology was as much a revolution for helicopters as it was for fixed-wing aircraft.

Shortly after the formation of Vertol Aircraft Corporation in March of 1956 (without Frank Piasecki), the company initiated a design study for a twin-turbine helicopter that had the characteristics that they thought the Army, Navy and Air Force *should* want. Vertol's Chief of Preliminary Design, Thomas Pepper, talked with Army experts in all fields of air mobility and learned that what the Army really wanted was an aircraft that could replace a two and one-half ton truck and carry whatever that truck could carry or tow. There was less agreement from the Army on the actual design. The Vertol design team continued to perform detailed interviews of Army, Navy, Marine Corps and NACA (later NASA) personnel to establish the design features the Army-proposed medium lift helicopter had to have to meet mission objectives. As the questionnaire circulated, several needs became clear:

- The ability to almost indiscriminately load personnel and cargo (extraordinary center of gravity range)
- A requirement for rear loading
- High location for the engines to reduce the possibility of FOD while also reducing the effects of noise and exhaust heat on ground personnel
- The ability to live and be maintained with the troops in the field (maintenance to be accomplished without having to unload cargo)
- Amphibious capability
- A simple rotor, drive and control system
- Suitability for aircraft carrier operations
- Design adaptability permitting the accommodation of alternate or upgraded engines
- Minimum downwash velocity

The Vertol design team developed about 300 different configurations for the proposed helicopter and concluded that the tandem rotor layout was the only configuration that could support the helicopter's mission and objectives for the following reasons:

- It produced a helicopter of minimum size for given payloads
- It gave the maximum utilization of available airframe volume
- It allowed the greatest possible center of gravity range
- It produced a low downwash velocity near the ground
- It provided a design with suitable control under adverse weather conditions (an important consideration during hover and low speed flight.

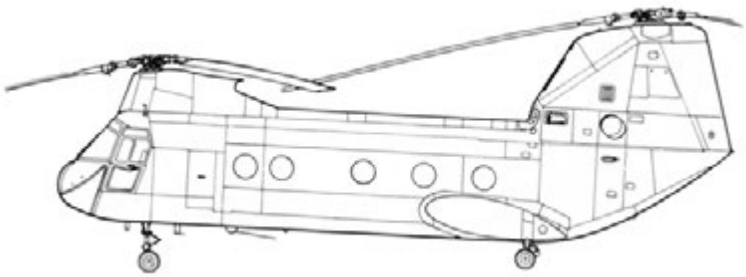
Development of Tandem Rotor Helicopters

Vertol Model 107 First Prototype – (Stiffening panel in place of forward door)

On 22 July, 1957, Vertol made a formal presentation to the Chief of Army Aviation for a three-step development effort for the Model 107 helicopter:

- Construction of a prototype to serve as a technology demonstrator based on the H-25 and H-21 and using a pair of engines loaned by the Army.
- Extrapolate the knowledge gained from the Model 107 Technology Demonstrator and use that data to design new rotors and drives.
- Move ahead with the preliminary design of a new Army medium transport helicopter, designated the Model 107-1

Using company funds, Vertol started in May 1957 on the first Model 107 prototype [N-74060] which was rolled out on 31 March, 1958 and first flown on 22 April, 1958. This prototype was designated as the YHC-1. Vertol received an initial contract for ten Model 107 aircraft (designated as YHC-1A). The Army considered the YHC-1A to be too heavy for the assault role and too light for the transport role so the Army requested a larger version and Vertol began design of the Model 107-1 which the Army designated V-114. Because of limited resources when five V-114s (now designated YHC-1B) were ordered, only three of the YHC-1As were built. Roll-out of the first aircraft [58-05514] was in July 1959 and the first flight was on 27 August. They were externally identical to the Model 107 prototype but significantly upgraded with more powerful engines, and a smaller cargo compartment. The YHC-1A was designed to carry 23 troops and a three-man crew.



Development of Tandem Rotor Helicopters

CH-46 Sea Knight/Vertol 107- 1962 [lxvii]

The YHC-1A would be improved and eventually adopted by the US Navy and Marines as the CH-46 Sea Knight. It first flew in August of 1962. Between 1964 and 1990, over 600 CH-46A/D models were delivered to the Marines and were promptly nicknamed "Frogs". Some updated CH-46E models remain in service with the Marine Corps and are being replaced by the Boeing V-22 Osprey. The Navy stopped using the aircraft in 2004. Often confused with the CH-47, the CH-46 is somewhat smaller (44'7" vs. 50'9" fuselage length, 51' vs. 60' rotor diameter and maximum gross weight (CH-46E) is 24,300lbs vs. 50,000lbs (CH-47D). The most obvious visual differences are the single forward landing gear and the stub wings or sponsons on the aft fuselage. Oddly enough, the F Model was the last production version but along with earlier aircraft was upgraded to *E* Model standards (T58-GE-16 engines) in the 1980s.

CH-46D Sea Knight

CH-46E Sea Knight

Additional versions of the aircraft were built as Model 107-IIs for commercial use in the US and Canada and for the military forces of Canada, Japan, Sweden, Thailand and Saudi Arabia.


CH-46F Sea Knight

Development of Tandem Rotor Helicopters

The photo at the right is often thought to show a CH-47 but actually is a V-107-II owned by Columbia Helicopters. The aircraft was towing a 220 ton hover barge during a 1982 test on the North Slope of Alaska on a 600 foot long line. The telephoto lens used to take the photo makes it appear as though the helicopter is closer to the ice than it actually is.

V-107 II Towing Hover Barge

Specifications [CH-46E][lxviii]
Crew: 2
Capacity: 25 troops or 15 litters
Engine: Two T-58-GE-16B – 1,870shp
Length Rotors Turning: 84"3"/25.70m
Length Fuselage: 45'9"/13.92m
Main Rotor Diameter: 51ft
Height: 15 ft 9 in/4.92m
Weight Empty: 15,537lb/7,048kg
Max Gross Weight: 24,300lb/11,023kg
Max Speed: 143kts/265km/h
Cruising Speed: 134kts/248 km/h
Service Ceiling: 14,000ft/4,267m
Fuel Capacity: 660gal/2,498ltrs

Vertol 107 II

Variants [number produced]
V-107/II – Commercial version [17]
KV-107/II and IIA – Kawasaki of Japan produced version/also sold to Saudi Arabia
CH-46A – USMC assault/utility medium transport version powered by two GE T58-GE-8B turboshaft 1,250shp engines [160]
CH-46D – Powered by two GE T58-10 turboshaft 1,200 shp engines [266]
CH-47F – Powered by two GE T58-10 turboshaft 1,200 shp engines [174]
CH-46E – Powered by two GE T58-16 turboshaft 1,870 engines [275 *upgrades* from A, D, F models]
HH-46D – US Navy SAR version, upgraded from A models with external rescue hoist and Doppler Radar
HH-46E – Marine SAR version, upgraded from CH-46E [3]
UH-46A – Navy transport version of CH-46A [24]
UH-46D – Upgraded Navy transport version [10 plus 5 upgraded UH-46

Technology Demonstrators

Model 227/237 – circa 1966

The photo below shows models of two Boeing proposed designs for a Heavy Lift Helicopter sitting next to a model of a CH-47. Information on these projects is limited. The photo indicates that both helicopters were at least twice the size of the Chinook. The 237 was similar to the Model 297 which had a 60ft rotor diameter.

Model 297 "Chinook Crane" – late 1960s

This was another Boeing design concept for a flying crane with 20-30 ton capability that was equipped with three turbine engines. It featured a kneeling landing gear, external double hoist, rearward facing loadmaster station (like the CH-54 Tarhe). This was a large aircraft with the aft rotor 27ft from the ground. This was one of several conceptual designs by Boeing for heavy-lift helicopters, none of which were ever developed.[lxix]

Model 298

Boeing design for a larger heavy-lift helicopter for both civilian and military use with up to 100 passenger capacity.

Model 299

Another design concept that apparently did not make the drawing board but would have been capable of hauling cargo up to 78,000lbs over long distances

BV347 – 1970 [lxx]

One of the most interesting "conversions" of the Chinook was the B347 which was developed by Vertol and the Army to test advanced technology concepts. It started as an A Model (65-07992) and was modified with a fuselage stretched 110inches, retractable landing gear, a four blade rotor system (with 62'4" blades) and an aft pylon extended upwards by 30 inches. The most obvious change was the addition of a hydraulically actuated, variable incidence wing mounted on the top center of the fuselage. Another unusual feature was the addition of a retractable gondola that descended from the forward cabin area and allowed a rear-facing pilot to control the aircraft. The BV347 was fitted with Lycoming T55-L11 engines (which would become standard on the C Model). The aircraft first flew on 27 May 1970 and subsequently went through an extensive test program. Issues that were identified in the initial test flights were corrected and additional testing was conducted in August of 1971 and April 1972. Comments from the Defense Technical Information Center test reports:" Level flight performance and out-of-ground-effect hover performance were significantly improved over that of the CH-47C helicopter. The excellent static longitudinal stability characteristics enhanced the mission capability of the aircraft. The steering and glide-path modes of the automatic flight path control system worked satisfactorily and reduced the pilot workload in instrument flight conditions. Cockpit noise and vibration characteristics were noticeably improved over those of the CH-47C." One of the conclusions of the test indicated: "Within the scope of this test, the increased accelerated flight capability and improved level flight performance achieved with the addition of the wing to the Model 347 helicopter are gained at the expense of increased weight and complexity." After the tests were conducted, the BV347 prototype was transferred to the Army Aviation Museum at Fort Rucker, AL where it is currently on display.

Technology Demonstrators

XCH-62 (Model 301) – 1975 [lxxi] [lxxii] [lxxiii]

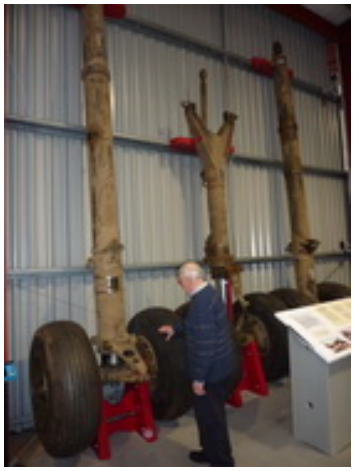
The XCH-62 was a prototype "flying crane" heavy lift helicopter developed by Boeing after winning a proposal completion with Sikorsky and their proposed S-73. It was the largest helicopter ever built in the western world. The single aircraft [73-22012] program was cancelled in 1975 with the prototype approximately 90% complete and before the initial flight could take place. Built to straddle and carry heavy loads, particularly containers, up to 40,000lbs, the aircraft was designed to have a maximum gross weight of 118,000lbs and was equipped with three turbine engines. The rotor diameter was 92ft. The aircraft had a retractable, rear facing cargo-operator's cockpit.

XCH-62 on display next to B347 at Ft Rucker


XCH-62 undergoing "de-accessioning"

A proposal in 1983 by NASA and DARPA to complete the aircraft was not funded and the partially completed aircraft was displayed outdoors until 2005 at the US Army Aviation Museum at Ft. Rucker, AL alongside the Model 347. In December 2005, the aircraft was "de-accessioned" (intentionally destroyed – see photo) due to extensive corrosion. Steve Maxham, director of the museum, made the following comment about the destruction of the aircraft:

"The operative reason for this item being de-accessioned is that it was never an aircraft. It never flew. It was essentially an incomplete concept model, the shell of an idea. The contract for production was halted mid-way through the project. It was never structurally completed. It was never mechanically completed. It was never electrically harnessed. There was only one rotor head produced, the second was not. There were only blades made for the one head. There were no drive train components. The upper structures both fore and aft were never manufactured. The interior was never completed. In no way, shape, or form did it qualify as an aircraft, historic or otherwise."


XCH-62 Landing Gear

Several components such as the landing gear were salvaged and are now on display at the Helicopter Museum in Weston-on-Mare in England. The photo at the right of the 18ft landing gear gives some idea of the scale of the aircraft. A civilian version of the aircraft was proposed by Boeing Vertol as BV-307 – almost twice the size of a CH-47D.

Technology Demonstrators

BV-360 – 1987 [lxxiv] [lxxv] [lxxvi]

Boeing privately funded construction of the Model 360 as an Advanced Technology Demonstrator featuring composite materials used in both structural and dynamic components – the rotor heads were constructed almost entirely of fiberglass and graphite composites and many of the transmission and control systems components were made with those composites such as the rotor shafts and swashplates. The basic fuselage structure is graphite frames and longerons. The exterior has a Nomex core surfaced with a Kevlar woven mesh with graphite reinforcement at the panel edges. Panels are attached by a combination of cold bonding and metallic fasteners. The BV-360 also featured a glass cockpit with six multifunction displays, digital automatic flight control system, retractable landing gear and fuel stored in crashworthy cells beneath the cabin floor. The floor is formed separately and includes the fuel tanks and cargo handling system - it is suspended on sprung counterweights to isolate it from vibration. The aircraft also had some "stealth" technology with completely enclosed engines and a quiet four-blade rotor system. It was slightly (1 foot) larger than the CH-46 with a maximum gross takeoff weight of 30,500lbs and a top speed of 200knots/230mph. Its first flight was on 10 June 1987 and only one was built and registered as N360BV. Also called the CH-46X, the aircraft had 123 flight hours when it was withdrawn from use in 1989 because of pylon cracks. The aircraft is currently (2010) on display at the American Helicopter Museum in West Chester, PA.

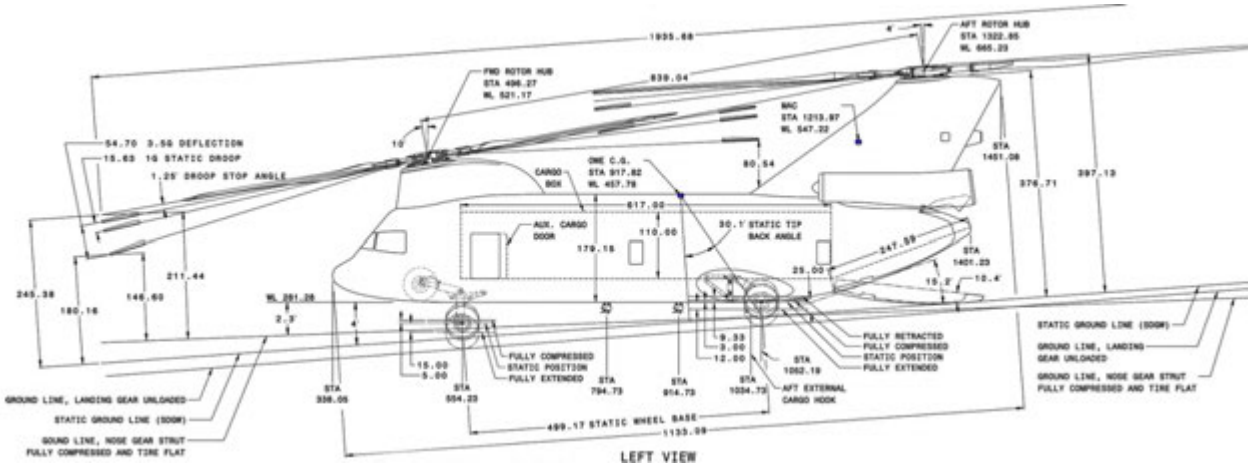
Model 360 (Note CH-46X on aft pylon)


Aft view of Model 360 - note enclosed engines

Model 360 in flight - note retracted landing gear

Technology Demonstrators

Advanced Tandem Rotor Helicopter (ATRH) - 2006



The ATRH was one of two designs (the other was a Quad Tilt Rotor) from the Boeing Phantom Works in response to the 2005 Joint Heavy Lift Concept Design and Analysis program. The helicopter is a much larger version (almost twice as long) of the CH-47 with a cargo compartment as long as the complete fuselage of the current Chinook (51ft) and 92ft diameter rotors. As of March 2011, no further development has taken place on this design. *Historical Note:* In 1978, Boeing proposed a commercial variant of the Chinook called BV-307. This aircraft resembles the ATRH in size and layout. Very little additional information is available but it was said to be designed to seat 225 passengers. [lxxvii]

CH-47A Prototypes - 1961

Model 114/YHC-1B [lxxviii] [lxxix] [lxxx]

On 25 June 1958, the Army issued and invitation for a General Management Proposal for the US Army Medium Transport Helicopter. Five companies submitted proposals for what was known as Weapon System SS471L – Bell, Kaman, McDonnell, Sikorsky and Boeing Vertol. Boeing's proposal offered several engine options – three engine Lycoming T-55 L3 (1,250shp each), four GE T64-GE8s (1,250shp each) or two GE T64--GE2 (2650shp each). Based on the T-55 configuration, the performance was expected to gross 33,703 pounds, have a maximum speed of 150kts and have four bladed, 59ft rotors. On 4 March, 1959, the Joint Army/AF Source Selection Board recommended that the Army select Boeing Vertol to produce the medium-transport helicopter. Because of Army funding problems, the Air Force was asked to negotiate a development contract for the new aircraft (now designated as Model 114) and in June 1959, Vertol received a contract for approximately $19 million to pay for engineering, tooling, five airframes, a mock-up and initial testing of the Model 114 which were designated YHC-1Bs. The aircraft was to be powered by only two Lycoming T-55-L5 turbo shaft engines rated at 1,940shp each and three bladed rotors (the four bladed rotors proved unnecessary due to reductions in design gross weight). Overall fuselage length was 51 ft. Mission requirements in the Aircraft Detail Specification called for a maximum gross weight of 33,000lbs

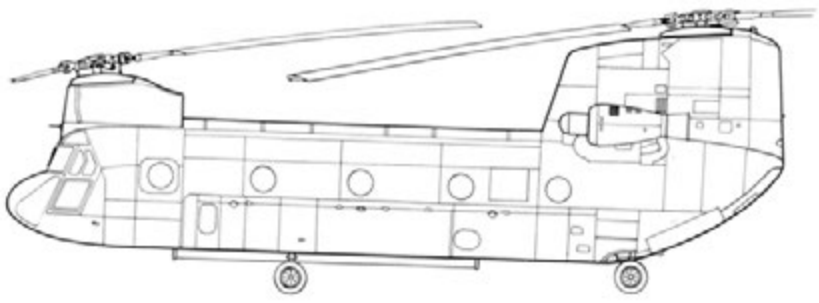
On 16 November, 1959, Vertol and Boeing announced that they were negotiating the acquisition of Vertol by Boeing and in March, 1960, Vertol became a division of Boeing. In 1962,
an expansion was begun on 290 acres of land in Ridley Township and was called the Engineering and Dynamics Center which would grow to include a wind tunnel, engineering lab, rotor blade fabrication plant, transmission assembly facility and a whirl tower. In 1965, Boeing Vertol built an Assembly Center on 112 acres of land adjacent to the Engineering and Dynamics Center. The original Vertol Springfield plant was closed in December of 1971.

The initial contract for five YHC-1B prototype aircraft was modified to add five production standard aircraft (designated HC-1B). In FY 1961, Vertol received a second production contract for an additional 18 HC-1Bs. All YHC and HC-1B aircraft were subsequently redesignated YCH-47A and CH-47A. None of the prototypes were deployed operationally and only one complete aircraft (59-04984) remains and is undergoing restoration at the Army Transportation Museum at Fort Eustis, VA.

CH-47A Prototypes - 1961

59-04982 – The first Chinook Prototype

Build 001 (B001), the first YHC-1B [59-04982] was rolled out on 28 April 1961 after several delays due to transmission design. On 12 July, 1961, the aircraft was involved in a major accident. As the aircraft was running up on the ramp, the decoupling device in the combining gearbox failed, dephasing the two rotors and causing them to strike each other. Total damage was done to the rotor system and the fore and aft pylons suffered extensive structural damage. Repairs were completed in November but the aircraft never flew. The Category I 50-hour preliminary flight approval test run was completed on 21 December and a release was issued for flight testing at the full design power of 4,400 shaft horsepower military rating. It was bailed to Vertol as a test bed and was used for endurance testing and later transferred to Aberdeen Proving Grounds where it was used for ballistic tests.



CH-47A Prototypes - 1961

The second prototype, [59-04983] was finished in June and was the first Chinook to fly – first a hover on 21 September 1961 piloted by Vertol test pilot Leonard LaVassar and its first official flight on 19 October from the Vertol Flight Test Facility at Philadelphia Airport. This aircraft was bailed to Vertol for test purposes and eventually delivered to the Army in 1964. It was later used as a training device at Fort Eustis, VA in the 67U maintenance course and traded to SECO Aviation/Anthony Aviation in 1992 who registered the aircraft as N97645. In 2000, the aircraft was cut up and the cockpit section was used by CAE to build a Chinook simulator for the RAF.

CH-47A Prototypes - 1961

The third prototype [59-04984] was also used for flight development until its delivery to the Army on 17 January 1964. It became the flying test bed for the CH-47B design and first flew in that configuration with Lycoming T55-L-7C engines rated at 2,850 shaft horsepower on 9 September 1966. It was used as a training device in the 67U maintenance course at Fort Eustis, VA then was traded to the same civilian company in 1992 as 59-04983 and was registered as N94368. 59-04984 was re-acquired by the Army Transportation Museum at Fort Eustis, VA in 2000 and is currently (2012) undergoing restoration.

CH-47A Prototypes - 1961

The fourth prototype [59-04985] was used for joint AF/Army adverse weather and extreme temperature testing at Eglin AFB from 6 June through 4 September 1962. The aircraft was tested in the Climatic Laboratory at temperatures of 70°F, 0F, -25°F, -45°F, -65°F, and 125°F. The test schedule included a normal ten-week cycle at the above temperatures, 1 two-week anti-icing test at 70°F to -10°F and a special one-week rotor blade re-evaluation at temperatures from -65°F to 125°F. The report on the extreme high and low temperature testing describes the test procedures, present selected instrumentation data, discusses the deficiencies uncovered, and makes recommendations to the Program Manager for their correction. Tests of extreme low temperature effects on the YHC-IB helicopter determined that it was not operationally suitable at temperatures below 0°F. Limited testing at extreme high temperature (approximately 125°F) revealed a serious APU operating deficiency. No further information is available on the disposition of this aircraft.

CH-47A Prototypes - 1961

The last prototype [59-04986] was delivered 29 August 1963 and after being used for flight development work at Boeing, it was transferred to Fort Eustis and used as a sheet-metal training aid. 59-04986 was transferred to a private individual/organization (Air-Mech-Strike Study Group) in Waverly Hill, Georgia and underwent limited restoration. As of February 2006, the aft pylon for this aircraft was seen at Fort Indiantown Gap, Pennsylvania in the Defense Material Reutilization Office (DMRO) area about to be disposed of as scrap. The fuselage of the aircraft, minus the aft pylon, rotor heads and engines remains on display in Georgia.

The sixth YHC-1B was built as a static test aircraft that was not intended to fly, and was not assigned a serial number and was tested to destruction.

NOTE: In July 1962, the DoD designated the YHC-1B aircraft as YCH-47A and the subsequent production aircraft HC-1B were designated CH-47A. In keeping with the Army practice of naming helicopters after Native American tribes (which was made official by Army Regulation 70-28 in 1969), "Chinook" is the name of a once prosperous tribe from the Columbia River area of Oregon.

CH-47A Early Production Aircraft - 1962

The first "production" aircraft HC-1B/CH-47A [60-03448 – B007] was the first of five ordered under the expansion of the original contract for the prototype aircraft and was delivered to the Army on 8 Feb 1963. It was designated as a JCH-47A [J for Joint] as a result of the Air Force and Army cooperation in developing the aircraft.] That summer, it was sent to Edwards Air Force Base for testing and then moved to North Dakota for cold weather tests in 1965. The photo at the right shows the aircraft with an airframe mounted lifting crane for removal and replacement of engines and blades. 60-03448 was later assigned to Fort Eustis, VA where it was used as a training device. No information is available on its final disposition

CH-47A Early Production Aircraft - 1962

CH-47As in storage at MASDC

60-03449 was the 8th aircraft built and after Phase F testing by the Army was allocated to the Fort Eustis maintenance training program as a Category C training device where it remained until 1975 when it was placed in storage at the Military Aircraft Storage and Disposition Center (MASDC) at Davis-Monthan AFB, AZ. [MASDC is now called the Air Force Aerospace Maintenance and Regeneration Center - AMARC]. In September 1992, 60-03449 was the last airframe to be inducted into the CH-47D program where it was converted to 92-00309. [A total of 30 A models were stored at MASDC during the 1975-1988 time frame [one aircraft went in/out/in again] and were all eventually inducted into the D model program.]

B009 was 60-03450 was the first CH-47A delivered to Fort Rucker, AL on 16 August 1962. On 19 March 1965, the aircraft and crew of three were lost in an accident near Hartford, AL when an aft rotor blade failed. The aircraft had been loaded to its maximum gross weight for testing.

60-03450

CH-47A Early Production Aircraft - 1962

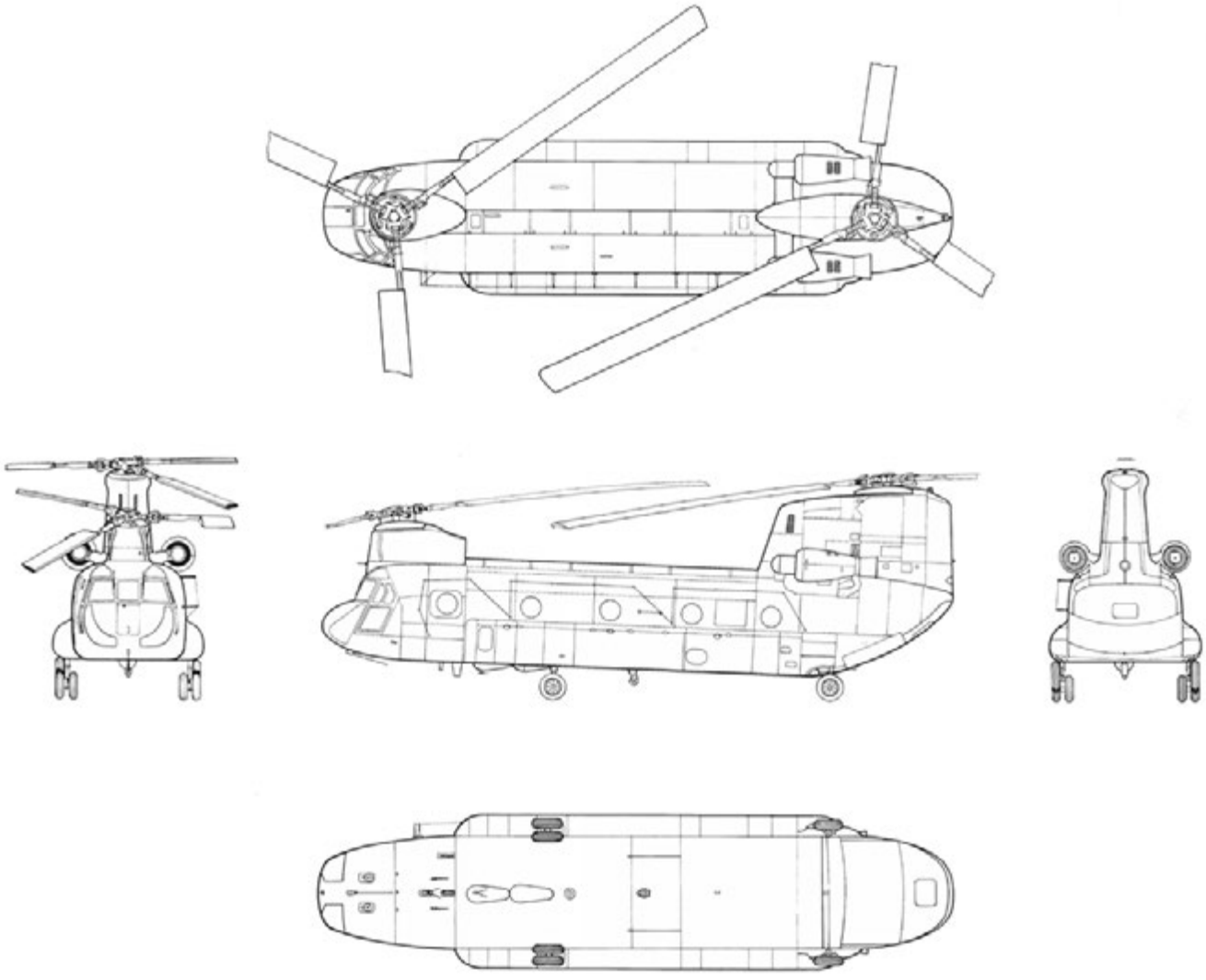
60-03451 Cockpit

The last of the original five production aircraft is 60-03451 which was delivered to the Army on 8 December 1962. In 1978, 60-03451 was transferred to the Army Aviation Museum at Fort Rucker, AL where it is on display as one of the few surviving CH-47A models and only one of two with dual aft landing gear (61-02408 is the other one). There are no flyable CH-47A models.

60-03451 on display at Ft Rucker

In addition to 60-03451, the following A model aircraft are on display as of November 2010: 61-02408 (Fort Campbell), ACH-47A 64-13149 (Redstone), 65-08025 (Khe Sahn, Vietnam), 66-00086 (Ho Chi Mihn City, Vietnam). 59-04984 has been undergoing restoration at Fort Eustis, VA. The fuselage of 59-04986 minus the aft pylon, rotors, engines and cockpit instruments is on display in Waverly Hill, GA.

CH-47A – 1963



CH-47A line drawings from *CH-47 Chinook in Action* by Wayne Mutza, courtesy of Squadron/Signal Publications, Carrollton, TX.

CH-47A - 1963

61-02410

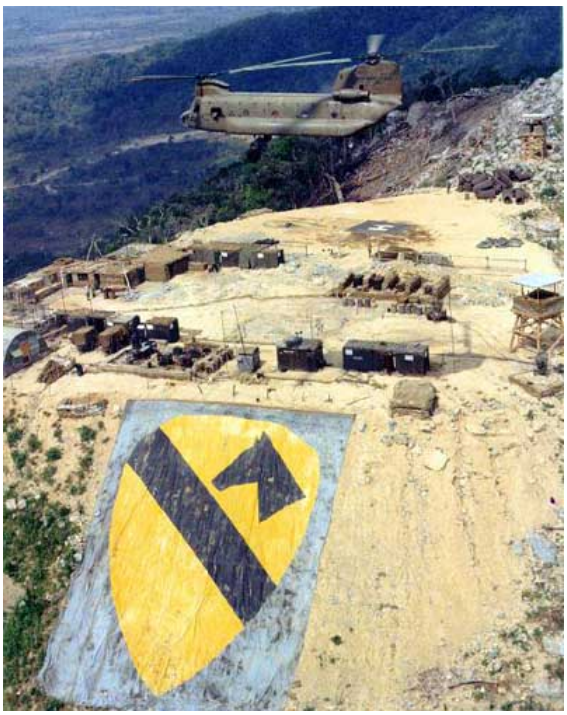
The first CH-47A aircraft was delivered to an Army unit at Ft Rucker , AL on 16 August 1962. Other operational units began receiving their aircraft in April 1963 and the first Chinooks deployed to Vietnam in July 1965 when all the aircraft from the 228th Assault Support Helicopter Battalion, 1st Cavalry Division (Airmobile), including 57 CH-47A helicopters, were preserved and shipped aboard the carrier USS Boxer. The trip took 25 days and the aircraft were flown from the carrier directly to their new operating location at An Khe. Within days of arriving in country, Chinooks were flying missions in support of the Vietnamese Army. On one of these early missions (18 Sep 65), SP5 Larry Truesdale, Flight Engineer on 63-07908 from C Company, 228th Assault Support Helicopter Battalion was killed by ground fire and became the first CH-47 crew member casualty of the war.

The production CH-47A was powered initially by Lycoming T55-L-5 engines rated at 2200 shp (1,640 kW) but then replaced with the T55-L-7 rated at 2650shp (1,980 kW) engines or T55-L-7C engines rated at 2,850shp . The CH-47A had a maximum gross weight of 33,000 pounds. Four aircraft were converted to ACH-47A gunship configuration (see "Guns-a-go-go" below).

A through C models were built with a single, center hook. Distinctive A model features: Aft pylon tapers to a point on the A model but is flattened on all subsequent models. Lower fuselage strakes were added to B model and later aircraft

CH-47A – 1963

Specifications
Crew: 3 (5 in Vietnam)
Capacity: 33 troops or 24 litters
Engine: Initially, two Lycoming T55-L-5 – 2,200shp/1641kW and later models T55-L7 – 2,400shp/1790kW
Length Rotors Turning: 98”1”/25.70m
Length Fuselage: 50’9”/13.92m
Main Rotor Diameter: 59ft
Height: 18ft6in/5.6m
Weight Empty: 15,537lb/7,048kg
Design Gross Weight: 24,300lb/11,023kg
Max Gross Weight: 33,000lb/14,969kg
Max Speed: 143kts/265km/h
Cruising Speed: 134kts/248 km/h
Service Ceiling: 14,000ft/4,267m
Fuel Capacity: 660gal/2,498ltrs



The CH-47A in Vietnam
A remarkable but little known fact is that of the 349 production A models, 314 served in the Vietnam War. Of the 34 that were not deployed to Vietnam, 23 were the earliest 60- and 61- tail numbers and four were lost to accidents before the war started. This means that more than 98% of the available A models had combat experience! And judging from the combat incidents reports from the Vietnam War, virtually every aircraft was damaged by at least small arms fire during its deployment. A total of 79 US Army A models were lost in the Vietnam War (45 to accidents and 34 to enemy action). More than 100 Army crew members were killed in these aircraft losses. An additional 75 A models were transferred to the Vietnam Air Force (VNAF). Six of these VNAF Chinooks were lost in accidents and the rest were either destroyed or captured by the North Vietnamese Army (NVA) by the end of the war. Three of the captured aircraft are still on display in Hanoi, Ho Chi Minh City and Khe Sahn. One of the captured A models is on display in a Chinese Air Museum. Overall, of the 314 CH-47A aircraft that provided support to the Vietnam War, only 160 survived.

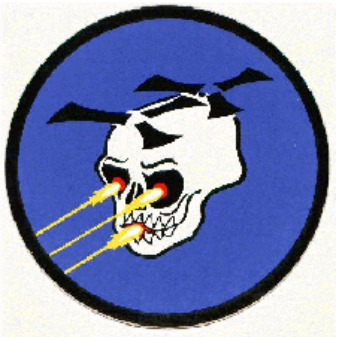
CH-47A - 1963

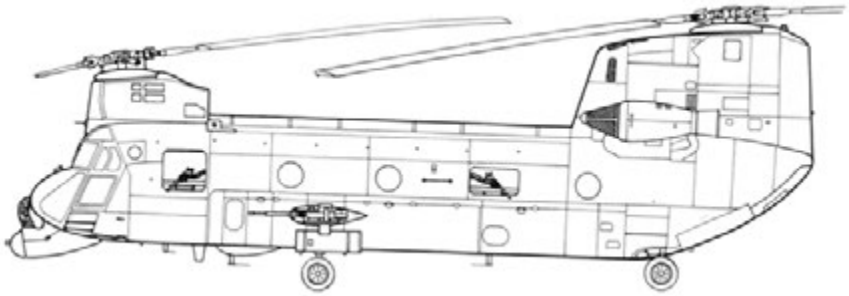
Disposition (Updated November 2012)
Total Delivered: 355 (6 prototype and 349 production aircraft) Note: Delivery Dates are the dates that the aircraft was accepted by the Army – *not necessarily in the order they were built*. Prototype aircraft were often bailed to Boeing for extended testing prior to "delivery" to the Army.

Prototype Aircraft – 6 [First Prototype Delivery to Army 26 April 1962 – 59-/Last Delivery to Army 24 April 1964 (B002 – 59-04983)]
Tested to Destruction – 2 [59-04982/B001 and B006]
Museum Exhibits – 2 [Fort Eustis (59-04984) & Waverly Hills, GA (59-04986 fuselage)]
Salvage/Attritted – 2 [59-04983 cockpit section used for RAF simulator; 59-04985 no details available]

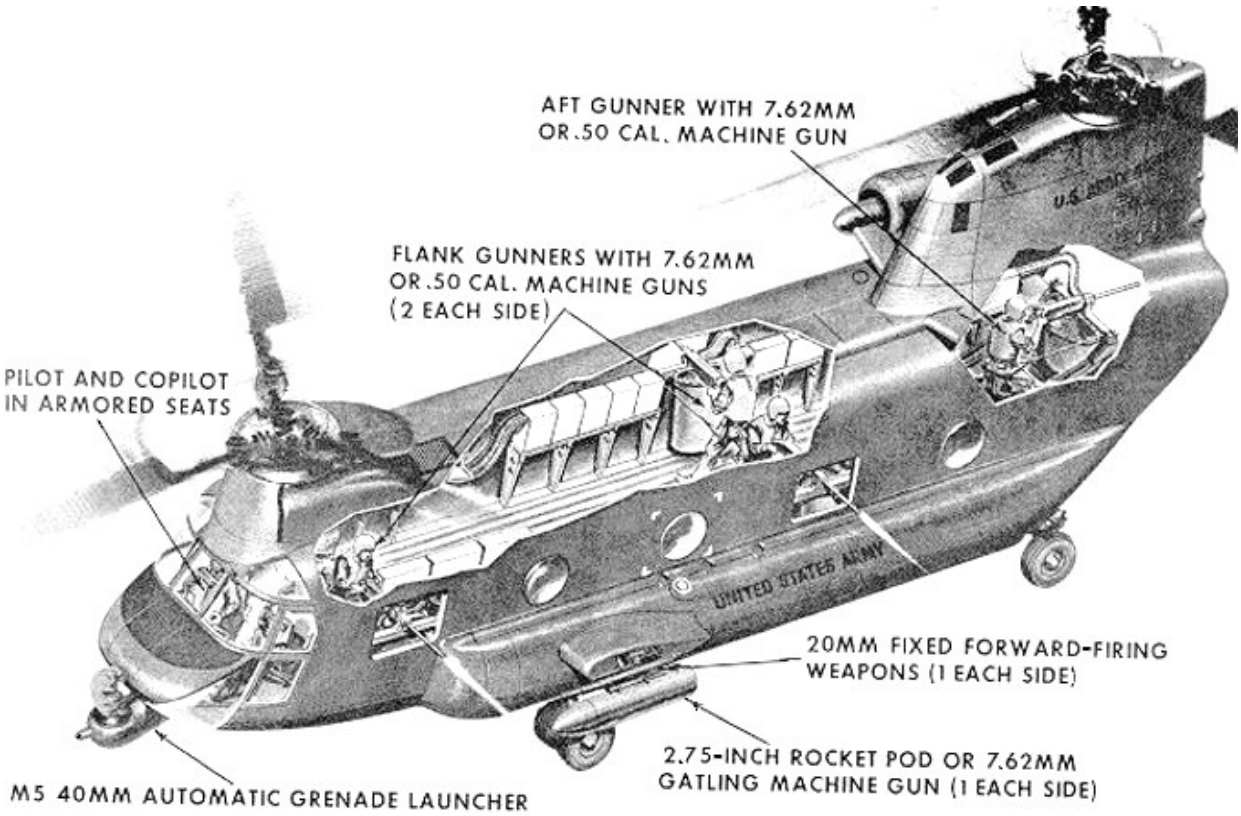
Production Aircraft – 349 [First Delivery to Army 8 Feb 1963 (60-13448)/Last Delivery to Army 12 May 1967 (66-19097].
Converted to D Model – 164
Converted to D Prototype – 1 (65-08008)
Converted to BC-347 – 1 (65-07992)
Converted to MH-47D – 6
Lost to Accidents – 59 (45 in Vietnam, 11 in US, 1 in Korea and 2 in Germany)
Lost to Enemy Action – 34 (Vietnam)
Transferred to VNAF/Lost to Accidents – 6
Transferred to VNAF/Lost to Enemy Action – 35
Transferred to VNAF/Captured by NVA – 34 [3 on display in Vietnam, 1 in China]
Tested to Destruction - 3
Sold to Thailand – 2
Sold to UK – 1
Attrited/Salvage - 4
US Museum Exhibits – 4 (59-04984 Ft Eustis; 61-02408 Fort Campbell; 60-03451 Fort Rucker; 64-13149 "Easy Money" Redstone Arsenal;)

ACH-47A – 1965





Originally known as the Armed/Armored CH-47A (or A/ACH-47A) (officially designated ACH-47A by the US Army—Attack Cargo Helicopter—and unofficially "Guns A Go-Go"), four CH-47A helicopters were converted to gunships by Boeing Vertol and first flew in November 1965. The aircraft and their nicknames were as follows: 64-13145 “Co$t of Living”, 64-13149 “Easy Money”, 64-13151 “Stump Jumper”, and 64-13154, “Birth Control”. The ACH-47A carried five M60D 7.62x51 mm machine guns or M2HB .50 caliber machine guns, two M24A1 20 mm cannons, two XM159B/XM159C 19-Tube 2.75" rocket launchers or sometimes two M18/M18A1 7.62x51 mm gun pods, and a single M75 40 mm grenade launcher in the nose.



ACH-47A - 1965

64-13145
"Co$t of Living"

64-13151
"Stump Jumper"

64-13154
"Birth Control"

ACH-47A – 1965

Initially, three of the AC-47A aircraft deployed to Vung Tau, Vietnam in June 1966, designated as the 53rd Aviation Detachment (Provisional), 1st Cavalry Division. The fourth aircraft, "Co$t of Living" remained in the US for testing. After the loss of "Stump Jumper" in a taxiing accident in August 1966, "Co$t of Living" deployed to Vietnam to join the remaining Chinook gunships. In December 1966, the unit was redesignated as 1st Aviation Detachment (Provisional) and attached to the 1st Cavalry Division's 228th Aviation Support Helicopter Battalion at An Khe. On 5 May 1967, "Co$t of Living" was lost when one of its M-24A 20mm cannon mounting pins came loose during a gun run, allowing the weapon to rotate upward and fire into the forward rotor blades. The damage to the blades caused the aircraft to crash with the loss of all eight crew members. The remaining two aircraft, "Birth Control" and "Easy Money" flew successful operational missions together for almost a year. On 22 February 1968, during the Tet Offensive, "Birth Control" was hit by ground fire and forced to autorotate to a landing near the Citadel of Hue. "Easy Money" came in and rescued the crew of "Birth Control" and was able to survive multiple small arms hits. The North Vietnamese Army subsequently fired mortar rounds at the grounded "Birth Control", completely destroying the aircraft. The sole remaining gunship, "Easy Money" was taken out of action since the AC-47A tactics required them to operate in pairs. The aircraft, 64-13149, has been restored and is on display at Redstone Arsenal, in Huntsville, Alabama.

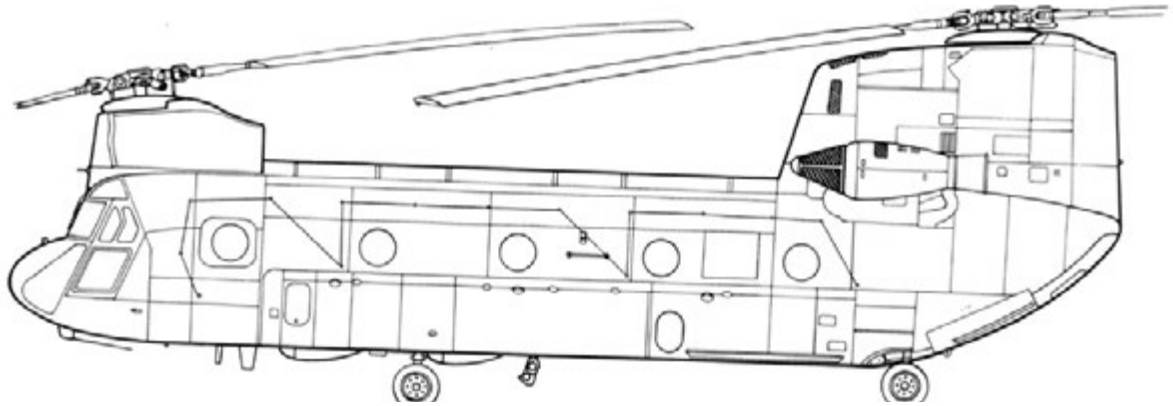
CH-47B - 1967

67-18472 in Vietnam

The CH-47B was powered by two Allied Signal Engines T55-L-7C, 2850shp (2,130 kW) engines. The third prototype A Model (59-04984) was modified with the new engines and used as a B model test aircraft and first flew on 9 September 1966. The first B models were delivered in 1967 and deliveries stopped in 1968 as the C model started production. The B Model featured a blunted rear rotor pylon, new rotor blades with increased span and cambered leading edges, strakes along the rear fuselage to improve directional stability in cruising flight and spoilers on the forward pylon. It retained the single hook of the A Model. B models deployed to Vietnam immediately after delivery began. One B Model [68-19138] was loaned to NASA and was later returned to the Army and converted to a D Model. Two B models were used for Presidential transport.
All surviving remaining B models were converted to Ds.

66-19138 (NASA 737)

CH-47B - 1967



CH-47B line drawing from *CH-47 Chinook in Action* by Wayne Mutza, courtesy of Squadron/Signal Publications, Carrollton, TX.

Specifications
Crew: 3
Capacity: 33 troops or 24 litters
Engine: Two Lycoming T55-L7C – 2,850shp/1976kW
Length Rotors Turning: 98″11″/25.70m
Length Fuselage: 50′9″/13.92m
Main Rotor Diameter: 60ft
Height: 18′6″/5.6m
Weight Empty: 19,676lbs
Design Gross Weight: 33,000lbs/14,969kg
Max Gross Weight: 40,000lbs/18,144kg
Max Speed: 143kts/265km/h
Cruising Speed: 130kts/231km/h
Service Ceiling: 15,000ft/4,572m
Fuel Capacity: 621gal/2,350L (non-crashworthy tanks) 566 gal/2,143L (crash worth tanks)

B Models in Vietnam
95 of the 108 CH-47B aircraft served in Vietnam. 26 were lost (13 to accidents and 13 to enemy action)

Disposition
Total Delivered – **108** [First Delivery 10 May 1967 (66-19098)/Last Delivery 28 Feb 1968 (67-18493)]
Converted to D Model – 75
Converted to D Model Protoype – 1
Lost to Accidents – 18
Lost to Enemy Action – 13 (Vietnam)
Sold to UK – 1

CH-47C - 1968

71-20954

The continuing need for higher performance led to the development of the CH-47C, initially delivered in 1968 with the same engines [T55-L-7C] as the CH-47B (called the CH-47C(-) and nicknamed "Baby C".

74-22280 with skis

The C model had larger capacity fuel tanks (1,100 gallons for non-crashworthy tanks compared to 621 gallons in the B model), an uprated transmission and over the production period, added fiberglass rotor blades (1978) and a crash-worthy fuel system. After the production of 106 C(-) models, the engines were upgraded to the T55L-11C models which delivered 3,750shp and this "model" was called "Super C". All of the initial "Baby C" models were upgraded to the new engines. C models were deployed to Vietnam starting in September 1968.

Several countries purchased C Model(designed as the Boeing Model 414) Chinooks for their military forces – Australia, Canada (called CH-147),Egypt, Greece, Iran, Italy, Japan (CH-47J and JA), Libya, Morocco, Nigeria, Singapore, South Korea, Spain, Taiwan, Thailand, and the UK.

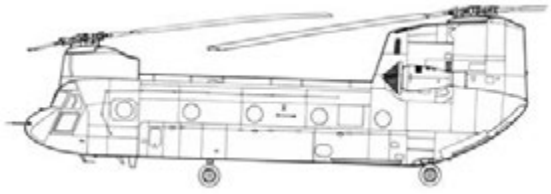
CH-47C - 1968

CH-47C 70-15008 with test camouflage scheme

It is interesting to note that the A, B and C model Chinooks, were not able to be certified by the FAA for civil use due to the non-redundant hydraulic flight boost system drive. A redesign in the D model led to the certification and production of the Model 234 for civilian use.

Disposition (Updated August 2012)

Total Delivered – **288** [First Delivery 30 March 1968 (67-18494)/Last Delivery 15 August 1985 (85-24744)]



Converted to Prototype D Model - 1
Converted to D Model – 200
Converted to MH-47D - 6
Converted to Prototype MH-47E - 1
Converted to MH-47E - 25
Lost to Accidents - 38
Lost to Enemy Action – 15 [12 in Vietnam, 2 in Laos and 1 in Cambodia]
Tested to Destruction – 1
Captured by North Korea – 1

Of the 224 C models produced before the end of the war, 166 served in Vietnam and 36 were lost in accidents or to enemy action.

Chinooks in Southeast Asia

Almost immediately after entering US Army service, Chinooks were deployed to Vietnam, where a total of 577 CH-47A, B and C models served between 1965 and 1973. This was 85% of the Chinooks built prior to 1973. 141 US Army Chinooks were lost in combat or wartime operational accidents and more than 200 crew members were killed in action during the war. 75 CH-47A aircraft were transferred to the South Vietnamese Air Force (VNAF). At the end of the war, the VNAF had lost 42 to accidents and enemy action and the balance were captured or destroyed by the NVA.

CH-47C 67-18529 was the last Chinook lost to enemy action – it was shot down by small arms fire while on a peacekeeping supply mission on 16 Feb 1973 - three weeks *after* the signing of the Paris Peace Accords on 27 Jan. The aircraft was a replacement for one with special Joint Military Commission markings (orange stripes) that was down for maintenance. One crewman, SP5 James L. Scroggins, died from injuries received in the crash of the aircraft and was the last Army Aviation crewmember KIA in the Vietnam War[lxxxi].

Historical Note: Just two months before his death, SP5 Scroggins was awarded the Distinguished Flying Cross for being the first individual to have successfully employed infra-red countermeasures (a flare) to defeat a shoulder fired, heat seeking missile in flight, saving his entire CH-47 aircraft and crew.

The Chinook proved especially valuable in "Pipe Smoke" aircraft recovery missions. The "Hook" recovered about 11,500 disabled aircraft valued at over $3 billion during the war[lxxxii].

Chinooks in Southeast Asia

The Chinook could be equipped with two door-mounted M60D machine guns and a ramp-mounted M60D. Some CH-47 "bombers" were "equipped" to drop tear gas or napalm from the rear cargo ramp onto NLF (aka Việt Cộng) bunkers.

The turbine engine helicopter with its great power, its reliability, and its smaller requirement for maintenance, was the technological turning point as far as air mobility is concerned. Actually, the key improvement of technology was the trio of the Huey as a troop lift bird, the Chinook with its larger capacity for resupply and movement of artillery, and the fledgling attack helicopter - these three together allowed US forces to take a giant step forward at this time.[lxxxiii]

At the peak of operations in Vietnam in March 1970, there were nearly 4,000 US Army helicopters, mainly Hueys, in country. The peak inventory of Chinooks was just over 300[lxxxiv] Out of the estimated 13,000 helicopters that had been employed between 1961 and 1972, over 5,000 were lost to operational accidents and enemy action[lxxxv].

One of the unique solutions to the demanding maintenance requirements for all helicopters was the deployment of the *USNS Corpus Christi Bay* which served as a floating depot maintenance facility off the coast of Vietnam. This enabled both routine and battle damage repairs to be performed "locally" without shipping the aircraft back to the States.

USNS Corpus Christ Bay

Air America's Chinooks [lxxxvi]

Eight US Army CH-47C aircraft were "loaned" in Oct/Nov 1972 to Air America in Southeast Asia under the "Project Black Horse" designation. [68-15828, 68-15857, 68-15864, 68-15992, 68-15998, 68-16016, 68-16019, and 69-17103] The aircraft were used to support troop transport missions in Laos, recovery of downed aircraft such as the C-46 shown in the photo and med-evac missions. The primary use of the aircraft was transporting large sling loads from Udorn, Thailand to isolated locations in Laos. All eight aircraft were returned (in working order) to the Army in 1973/74 and eventually converted to D models. During their service in SEA, the aircraft are shown in the Army GOLDBOOK database as being assigned to NASA Langley Research Center!

Air America CH-47C with C-46 sling load

Air America CH-47C "Hook 019" [68-15857] at Udorn

Other Helicopters in Southeast Asia

In addition to the Piasecki/Vertol CH-21 Shawnee that proceeded the Chinook in Vietnam, two tail rotor helicopters also played a role in what was then referred to as "heavy" lift operations. One of the major roles of all cargo helicopters in Vietnam was downed aircraft recovery. Operated under the project name "Pipesmoke" [after one of the original commander's pipe smoking habit], CH-37 B Mohaves (there were nine in country starting in 1963) and CH-54A Tarhes or Skycranes (starting in the fall of 1965 at about the same time Chinooks were arriving in country) were used to recover crashed fixed and rotary wing aircraft. Until the CH-54B models arrived in 1969, there were initially thirty A models in country. The CH-54A with a 20,000lb payload was better suited for heavy lift than the Mohave with only a 5,000lb payload. The CH-47As with a payload of about 10,000lbs and the CH-47Bs with a payload of up to 15,000lbs made up the majority of lift capability due to the much larger number of aircraft available. Regardless of the helicopter used, these recovery efforts returned literally thousands of aircraft to maintenance activities and resulted in a savings of billions of dollars.

CH-54 with CH-47 Sling Load

CH-54 with CH-37 Sling Load

CH-37 with CH-21 Sling Load

CH-47D - 1982

After the Vietnam War, Boeing and the Army began planning a major fleet upgrade that led to development of the CH-47D. One A, B and C model aircraft [65-08008, 67-18479, 67-18538] were selected for modification to D model standards and used for prototype testing and given new tail numbers (76-08008, 76-18479, 76-18538). Two of these prototypes were later inducted into the D model production line while 76-18479 was used as a maintenance trainer at Fort Eustis. The first prototype flew on 14 May 1979 and the first production D model flew on 26 February 1982. 441 early model Chinooks (A-164, B-75, C-200) went through an extensive modernization process in Philadelphia that produced an essentially new CH-47 fleet. [Totals include 11 CH-47C aircraft originally built by Augusta for Iran and seven CH-47C airframes previously owned by Australia]. A total of 444aircraft were remanufactured - one aircraft (84-24166) crashed during a Boeing test flight and was not delivered to the Army. 443 remanufactured and 2 new build D models (92-00367, 92-00368) were delivered to the Army between 1980 and 1995. One additional new build, 98-02000 (which was not delivered until 2002) was assembled from left-over parts and assemblies at the Boeing plant and received the nickname "Mr. Potato Head". All other D models are remanufactured A, B or C model aircraft.

The process for upgrading earlier models involved removing the rotors, engines, transmissions as well as stripping the airframe down to the ribs. After a thorough inspection, the airframe was reassembled with the new systems which added about 20 years to the airframe life. The CH-47D features composite rotor blades, an improved electrical system with twice the generator capability, unrated transmissions with integral lubrication and cooling, modularized hydraulics, triple cargo hooks, avionics and communication

CH-47D - 1982

improvements, single-point pressure refueling and more powerful L-712 (subsequently upgraded to L-714A) engines that can handle a 25,000 pound useful load, nearly twice the Chinook's original lift capacity. The most significant external change was the introduction of a large, rectangular air intake for transmission cooling in the leading edge of the aft pylon as well as a triple hook cargo system. Each aircraft that was upgraded received a new serial number.

The CH-47D Chinook already has been the U.S. Army's prime mover for 20 years, and was a central element in U.S. Army operations in the Persian Gulf War, where more than 160 Chinooks carried U.S. and Allied troops in history's largest aerial assault to outflank Iraqi forces and cut off their retreat from Kuwait. D models also provided heavy lift support in Bosnia, Operation Iraqi Freedom and Operation Enduring Freedom (Afghanistan).

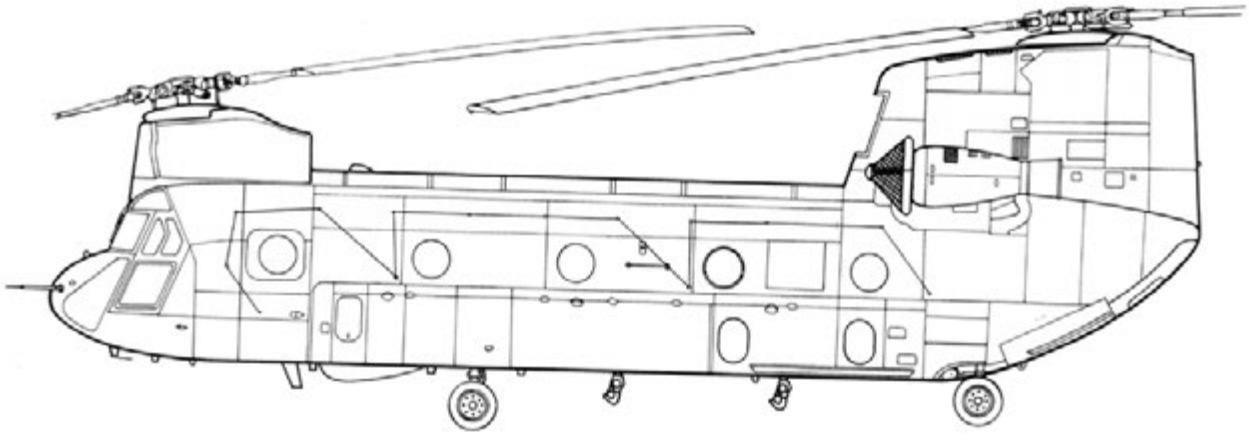
Disposition (Updated August 2012)

A total of 444 D and 12 MH-47D models have been built. All but three of these aircraft [92-00367, 92-00368 and 98-00200] were converted from A, B and/or C models.

Three D models were initially prototypes converted from an A (65-08008 to 76-08008), B (67-18538 to 76-18538) and C (67-18479 to 76-18479) model. Two of these were subsequently upgraded to full D model status (76-08008 and 76-18538) and 76- 18479 was used as a trainer. All MH-47D aircraft were converted from A or C models and have subsequently been converted to G models, inducted to the F model program or otherwise attritted.

In Service 01 November 2012: 235 (Active - 55, Guard – 133, Reserve – 41, Depot - 6)
Converted into F model Prototypes – 3 [2 later inducted into F model program]
Inducted into F model program (airframe scrapped) – 97 (93 CH-47D and 4 MH-47D)
Converted to MH-47G – 39
Prototypes converted to D Models - 2
Lost to Accidents – 39 [37 CH-47D and 2 MH-47D]
Lost to Enemy Action - 8 [7 CH-47D and 1 MH-47D]]
Sold/Leased to Canada – 7 (One aircraft lost to Enemy Action in Afghanistan)
Sold to Australia - 2
Used as Maintenance Trainers – 20
At Depot - 6

CH-47D - 1982



CH-47D line drawing from *CH-47 Chinook in Action* by Wayne Mutza, courtesy of Squadron/Signal Publications, Carrollton, TX.

Model 234 – Commercial Variants - 1980

The Model 234 is essentially the civilian version of the CH-47C, some with enlarged fuselage side fairings to allow additional fuel (2,090 gallons vs. 1,129 like the MH-47G), some with no fuselage fairings, more windows, weather radar and upgraded engines (AL5512 - commercial derivatives of the T55-L-712), miscellaneous systems from the CH-47D program such as independent 40kVA generators and a redundant hydraulic boost system drive, a rotor brake from the RAF Chinook Mk1 program and forward landing gear shifted forward.

Helikopter Services Model 234LR

The first Model 234, N234BV first flew on 19 Aug 1980. A total of 13 Model 234s was produced and three have been lost in accidents. Originally, 6 were built for British Airways, 3 for Helikopter Services (Norway), 1 for Atlantic Richfield and three for the Taiwanese Army/National Forest Service/Air Asia.

British Airways Model 234LR

The only Model 234s still in use as of Nov 2010 are the three Taiwanese aircraft and seven UTs owned/operated by Columbia Helicopters [N237CH, N238CH, N239CH, N241CH, N242CH, N245CH and N246CH]. In 2006, Columbia Helicopters purchased the Type Certificate of the Model 234 from Boeing and completed the process for a Production Certificate in 2009.[lxxxvii] At one time, Donald Trump operated two passenger versions of the Model 234 [N225RA and N241CH] to shuttle customers from New York to/from his casinos in New Jersey.

Trump Enterprises Model 234LR

Model 234 – Commercial Variants - 1980

Versions:

Model 234LR – Optimized for long range passenger/cargo missions with seating up to 44 passengers and a maximum gross takeoff weight of 48,500lbs. Two British Airways versions were lost in accidents in 1986 and 1997. One Helikopter services aircraft was sold to Trump Airlines and later to Columbia Helicopters where it was converted to a Model 234UT. The remaining 7 aircraft were sold to Columbia Helicopters and converted to Model 234UTs. Model 234ER - Passenger configuration for extended range missions with one or two internal auxiliary tanks in addition to the enlarged side fairing fuel tanks. One built for Atlantic Richfield for offshore oil platform support.

Taiwanese Forest Service Model 234MLR

Columbia Helicopters Model 234UT

Model MLR – Similar to the LR but equipped with a utility interior. All three were built for the Taiwan Army but were transferred to the Taiwan National Forest service and later leased to Air Asia for civil search and rescue work.

Model 234UT – Eight conversions of 234 LR/ER airframes optimized for cargo operations by Columbia Helicopters but capable of carrying passengers. External fuselage fairings were removed which improved rotor downwash characteristics and reduced weight. 978 gallons (3,702 liters) of fuel is carried in two cylindrical tanks in the forward fuselage. This version has a 51,000lb gross takeoff weight and can carry up to 28,000lbs on the single cargo hook. This aircraft is used for commercial logging, firefighting as well as installation of antennas and other large objects in remote locations. One UT was lost in a 1997 accident during logging operations.

Columbia Helicopters 234UT in Ecuador

CH-47F - 2006

CH-47F CAAS Cockpit

The F model is the latest in the Chinook line. Initially called the "Improved Cargo Helicopter" (ICH), it incorporates major upgrades to the avionics systems with the addition of a "glass cockpit" – the Common Avionics Architecture System (CAAS) featuring five Mutifunction Displays (MFD) replacing the old analog instruments. Another major avionics upgrade is the Digital Advanced Flight Control System (DAFCS) which provides unprecedented automatic hover control. Another enhancement is an upgraded airframe with larger, single-piece, milled sections. This "tuned" fuselage significantly reduces vibration in the cockpit as well as reducing maintenance costs. The F model is also designed for rapid deployment with greatly improved air transportability by reducing the teardown and buildup times by 50%. The F model is equipped with two Honeywell T55-L-714A engines with 4,868 shaft horsepower. The first three Engineering and Manufacturing Development (EMD) CH-47Fs [98-00011, 98-00012 and 03-08003] were upgraded D models [83-24107, 83-24115 and 83-24121]. First flight of the EMD F model was in 2001. Two of the EMD aircraft were inducted into the F model production system and one was retained by the Boeing Company for testing. The first production aircraft [05-08701] was rolled out on 15 June 2006 and first flew on 23 October 2006. Since then, 210 aircraft have been delivered (as

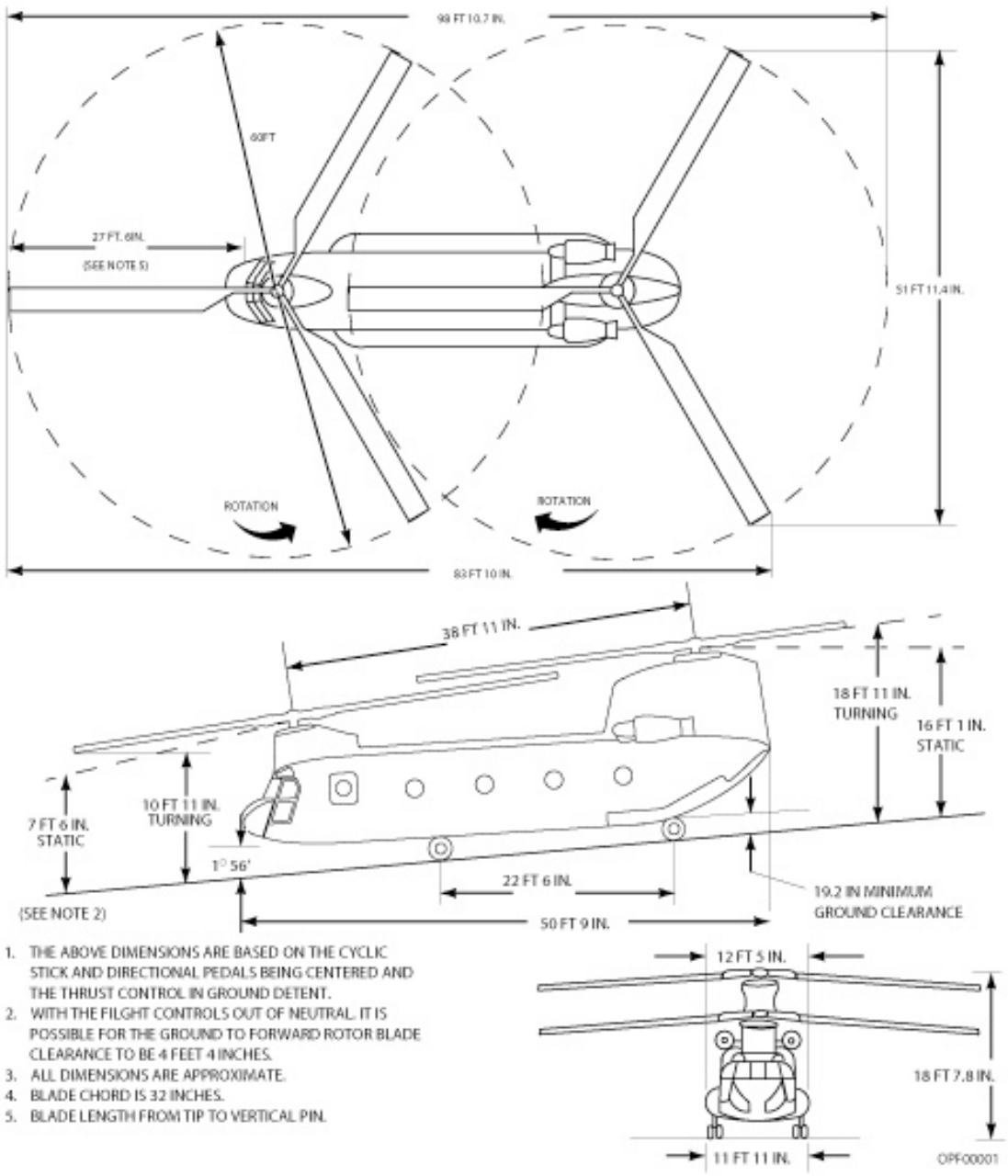
of Nov 2012) and 11 units (8 Active/3 Guard) are now equipped and operational with the new aircraft. A total of 534 new aircraft (F and G models) are planned by the end of FY2020.

When the A, B and C models were upgraded to D model standards, the remanufacturing process included stripping down the aircraft and performing the upgrades to the old airframe. The F model program includes a remanufacturing component (stripping off usable items) but does not re-use the airframe. All F models are built with a completely re-designed and newly manufactured airframe. While some aircraft are assembled with "recycled" components, approximately 47% of the F models produced so far are complete "new builds".

Disposition

Delivered [Jun 2006 – Oct 2012] - 210
Lost to Accidents – 5
Lost to Enemy Action (Afghanistan) – 2
Sold to UAE - 2
Depot – 1

CH-47F - 2006



1. THE ABOVE DIMENSIONS ARE BASED ON THE CYCLIC STICK AND DIRECTIONAL PEDALS BEING CENTERED AND THE THRUST CONTROL IN GROUND DETENT.
2. WITH THE FILGHT CONTROLS OUT OF NEUTRAL, IT IS POSSIBLE FOR THE GROUND TO FORWARD ROTOR BLADE CLEARANCE TO BE 4 FEET 4 INCHES.
3. ALL DIMENSIONS ARE APPROXIMATE.
4. BLADE CHORD IS 32 INCHES.
5. BLADE LENGTH FROM TIP TO VERTICAL PIN.

CH-47F - 2006

One of the most significant elements of the CH-47F program is the Transportable Flight Proficiency Simulator (TFPS). This is a full scale cockpit replication that provides a dynamic training environment with all the latest software and components for complete pilot and co-pilot stations. Each simulator can be transported by C-5 aircraft, ship or truck and set up in a matter of a few days at any location even with generator power. The simulator increases operational awareness and is deployed to each new CH-47F unit as part of the initial training package to aid in the transition from the D model to the F.

Inside the simulator, the computers, projectors,, screens and other equipment provides

images and motion cues that can mimic virtually any flight environment – day, night, snow, brown outs, night vision goggles and with extremely detailed graphics for just about any location. All kinds of emergency procedures can be practiced safely in the simulator that would not be practiced or flown in training flights. Hours spent in the simulator mean fewer hours of expensive or dangerous in-air training.

Special Operations

Special Operations Chinooks perform low-level, high-speed flight for infiltration and exfiltration missions at low level, day or night, in all weather. Operated by the 160th Special Operations Aviation Regiment (SOAR), the MH series Chinooks are equipped for operations in low ambient light conditions as evidenced by their name: "Night Stalkers". All MH-47D and MH-47E aircraft have been converted to G models (or are awaiting conversion) or inducted into the F model program and the 160th Chinook fleet is now all G models.

MH-47D - 1983

In the mid-1980s, about 32 CH-47D models were upgraded to a Special Operations Aircraft (SOA) configuration with improved navigation gear, satellite communications links, countermeasures systems and pintle-mounted machine guns. Between 1983 and 1990, twelve MH-47D aircraft were produced with nose radar, forward-looking infrared nose camera, an inflight refueling probe as well as the improved navigation and communications systems previously developed for the SOA configurations. All twelve aircraft were converted from A and C model assets. Two MH-47D aircraft were lost to accidents and one was lost to enemy action in Afghanistan in 2005. By 2007, all of the remaining MH-47D aircraft had been converted to MH-47Gs (5) or inducted into the F model program (4).

MH-47E - 1991

The MH-47E was the first SOA to incorporated enlarged integral fuel tanks carrying twice as much fuel as all other Chinooks, giving the aircraft a wider profile as well as extended range. The MH-47E has an external rescue hoist and features upgraded avionics with multifunction displays, terrain-following radar as well as two Lycoming T55- L714 engines. A total of 26 E models were delivered. Three MH-47E aircraft were lost to accidents and two to enemy action in Afghanistan. All remaining aircraft have been converted or are pending conversion to MH-47G models.

MH-47G - 2004

Based on the improvements of the CH-47F program, the MH-47G has the same basic configuration as the MH-47E (enlarged integral fuel tanks, refueling probe, etc) but adds a special operations Common Avionics Architecture System (CAAS) avionics package as well as multi-mode radar with terrain following/terrain avoidance and weather detection. It is armed with two M-134 "Miniguns" and two M-240D machine guns. The MH-47G can support Fast Rope Insertion and Extraction (FRIES) and Special Patrol Insertion & Extraction System (SPIES). The normal crew for the aircraft is a Pilot, Co-Pilot and three crew chief/gunners. All 62 MH-47G aircraft delivered to date are converted CH-47D (40), MH-47D (4) or MH-47E (18) airframes. Three aircraft have been lost to accidents.

Chinooks in Combat

Vietnam – 62 destroyed by enemy action and 79 lost to accidents [includes losses in Laos and Cambodia].
OIF – One destroyed by enemy action and 10 lost to accidents
OEF – (as of 01 Nov 2012) – 11 destroyed by enemy action and 22 lost to accidents.

Chinooks pioneered combat support operations in Vietnam and the recent combat operations in Iraq and Afghanistan have clearly demonstrated the value of heavy lift helicopter capabilities, particularly as roads mined with IEDs (Improvised Explosive Devices) and poor highway infrastructures made convoy operations more dangerous. Chinook operations tempos and availability have been at all-time highs and continue to provide round-the-clock support to our troops. Typical mission objectives call for the aircraft to arrive, "on target, plus or minus 50 meters, plus or minus 30 seconds."[lxxxviii] Operating conditions in Afghanistan (higher altitudes and limited roads) dictate the use of helicopters for just about every type of mission. Dust conditions are significant factors in every-day operations and the advanced flight control system in the F model is proving to be an invaluable factor in safely completing missions in all conditions.

Foreign Chinook Users

Seventeen foreign countries currently operate about 280 Chinooks and additional countries are in negotiations to purchase new aircraft. Japan and the United Kingdom have the largest fleets followed by Italy, South Korea, Egypt, Spain, Singapore, Greece, Netherlands, Taiwan, Australia, Thailand, Canada, Morocco, Libya and Iran. Other countries have expressed interest in the CH-47F and discussions are on ongoing.
Chinooks were produced under license overseas by two companies – Kawasaki in Japan and Elicotteri Meridionali (later Augusta/Westwind) in Italy. Kawasaki produced or assembled 56 CH-47J (34) and CH-47JA (22) aircraft for the Japanese Ground Self Defense Force (32) and Japan Air Self Defense Force (24)[lxxxix]. Elicotteri Meridionali acquired the rights to product the CH-47C beginning in 1970 and eventually produced about 200 Chinooks for Iran, Greece, Egypt, Italy, Libya and Morocco. [xc] [xci] [xcii] [xciii]

Argentina - Army (2) and Air Force (3)

Argentina acquired five Model 308/309 (similar to the CH-47C) Chinooks. Two were lost in accidents, one was captured [AE520] and one was destroyed [AE521] by British forces during the Falklands War. The remaining aircraft [H91] is on display. The captured aircraft was taken to the UK and used as a ground trainer. The aft pylon was later used to repair an RAF Chinook and the cockpit was donated to the United States Missing in Action/Prisoner of War recovery project.

Australia – Air Force and Army

Australia initially purchased 12 CH-47C models in 1973 for the RAAF. Nicknamed "Chooks" (Aussie slang for "chicken"), one aircraft was lost in an accident and the others were placed in storage as the Army took over helicopter support from the Air Force. Seven of the C models were eventually returned to the US Army and converted to D Models. The remaining four C models were upgraded to D standards and an additional two D models were delivered in 2000. The Australian Army is purchasing the CH-47F.

Foreign Chinook Users

Canada

Canada bought nine CH-47C aircraft in 1974 which were designated CH-147 in RCAF service. One was lost to an accident and the remaining eight were retired as an economy measure in 1991 and eventually refurbished and sold to the Netherlands. Canada purchased six US Army CH-47D aircraft "in place" in Afghanistan in 2008 [84-24154, 84-24181, 86-01650, 86-01651, 87-00086 and 89-00130]. One of those aircraft was subsequently lost to enemy action. Canada has ordered 15 CH-147 (CH-47F) aircraft for delivery in 2013-14.

Egypt - Air Force

In 1981, Egypt purchased 15 CH-47Cs manufactured by Elicopteri Meridionali which were originally built for the Imperial Iranian Air Force but never delivered as a result of the fall of the Shah of Iran in 1979. Egypt later bought four CH-47D models and equipped them with Engine Air Particle separators and weather radar. They upgraded six of the C models to D standards.

Foreign Chinook Users

Greece - Army

In 1980, Greece purchased ten CH-47C models built by Elicopteri Meridionali for the Greek Army, nine of which were later upgraded to D standards. They later ordered seven CH-47SD models which they designated CH-47DG.

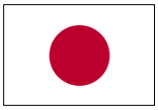
Iran - Imperial Iranian Air Force/Islamic Republic of Iran Air Force

The Imperial Iranian Air Force purchased 20 CH-47Cs from Boeing (built under license in Italy by Elicotteri Meridionali) in 1971 and another 70 built in 1972-76. They ordered 50 more aircraft but that order was cancelled after the overthrow of the Shah in 1979. Several aircraft were lost in the 1980-88 Iran-Iraq war including three shot down by an Iraqi Mirage F-1, but a number of the helicopters may still be in service in the country.

Foreign Chinook Users

Italy - Army

Elicotteri Meridionali (Augusta) built 38 CH-47Cs for the Italian Army, 26 of which were later upgraded to the C+ configuration. Italy has expressed interest in purchasing CH-47F aircraft to replace the remaining C models. Italy currently has 20 Chinooks in their fleet.



Japan – Air Self-Defense Force and Ground Self Defense Force

Boeing licensed production of the Chinook to Kawasaki Industries in Japan and they built a total of 56 aircraft starting in 1986. Two models were produced – the CH-47J which was similar to the CH-47D and the CH-47JA which had the enlarged fuel tanks and weather radar like the CH-47SD.

Libya - Air Force (14) and Army (6)

Libya purchased 20 CH-47Cs built by Elicotteri Meridionali (Augusta). Indications are that the Army Chinooks have been retired and all remaining aircraft are assigned to the Air Force. Libya sold 12 of their Chinooks to the United Arab Emirates (UAE) in 2003.

Foreign Chinook Users

Morocco

Morocco purchased 12 CH-47Cs manufactured by Elicotteri Meridionali (Augusta). It is reported that three are still in service and that they are interested in buying three CH-47D models.

Netherlands

The Netherlands purchased 7 CH-47C Models from Canada which were upgraded to D Model standards. They bought six "new-build" CH-47D Models in 1995. The Dutch aircraft have the longer nose for weather radar and a "glass cockpit". The Dutch were the first to order the export model of the CH-47F

Nigeria

Five CH-47Ds were ordered by the Nigerian Air Force but the order was cancelled. One aircraft was completed with an exceptional camouflage scheme (see photo at right) but later refurbished and sold to another country.

Foreign Chinook Users

Singapore - Air Force

Singapore initially purchased CH-47D models and later added CH-47SDs.

Spain

Spain bought 13 CH-47Cs and designated them as HT-17s. Nine were updated to D standards and an additional 6 new aircraft were purchased.

South Korea – Army and Air Force

South Korea operates both CH-47D and HH-47D configurations. The HH-47D is equipped for Search and Rescue duty and fitted with larger fuel tanks and nose radar.

Foreign Chinook Users

Taiwan (Republic of China)

Taiwan purchased three Model 234 Chinooks and nine CH-47SDs for the Army. The three Model 234s were transferred to the Taiwanese Forestry Service and later leased to Air Asia.

Thailand

One of the earliest foreign operators of the Chinook was Thailand who bought two A Models [64-13136 and 64-13148] and later acquired five international (414) models with the nose radar in 1989.

United Arab Emirates (UAE)

UAE has purchased 6 CH-47Fs.

Foreign Chinook Users

United Kingdom (RAF) [xciv]

One could probably write a book about the Chinook in service with the RAF. After a less than sterling experience with the tandem rotor Belvedere HC [Helicopter, Cargo] Mk 1 from 1961 to 1969, they ordered (and subsequently cancelled) 15 Chinook HC-1 aircraft based on the CH-47B.

RAF Belvedere HC-1

It was not until 1978 that 33 Chinook HC-1 or HC-Mk1 models were finally ordered and started service in 1981. These were upgraded from the basic CH-47C aircraft design with triple cargo hooks, a rotor brake (eventually used on the MH series Chinooks) and a single point pressure refueling system. They added eight more HC-Mk1s with the same engines as the CH-47D by 1986 and all the earlier models were upgraded to this standard as well as being fitted with fiberglass rotor blades. The total of 41 aircraft were then designated HC-Mk1Bs.

RAF Chinook HC Mk1

RAF Chinook HC Mk2

The surviving 32 HC-Mk1Bs were later upgraded to full CH-47D standards and called HC-Mk2 and an additional nine were purchased, six of these with a strengthened fuselage and provision for an in-flight refueling probe and designated HC-Mk2A. The RAF ordered eight HC-Mk3 aircraft for delivery in 2000 with special operations features from the MH-47G such as extended fuel tanks, in-flight refueling and advanced avionics.

RAF Chinook HC Mk3

Foreign Chinook Users

Problems with hybrid analog/digital cockpit software caused the HC Mk3 aircraft to be delivered but never placed in service. The aircraft are to be reverted to Mk2 standards. All HC Mk2, HC Mk2A and HC Mk3 Chinooks (46) will then be upgraded to HC Mk 4/4A/5 models under a program called Project Julius. The upgraded aircraft will have a new digital flight deck suite and nose-mounted FLIR. The RAF has also ordered 12 CH-47F aircraft which will be designated HC Mk6 and are expected to be delivered in 2013/14. RAF Chinooks have served in the Falklands War in 1982, the Gulf War in 1992, the Balkans, Iraq and Afghanistan where they have lost two aircraft to enemy action. In the Falklands War, the British Army captured an Argentine CH-47 and brought it back to the UK to be used as a training device and to repair one of their Chinooks. As the photos below illustrate, the RAF puts on an outstanding air show using Chinooks and has used a number of interesting camouflage schemes on them over the years.

Specifications

	CH-47A	CH-47B	CH-47C	CH-47D	CH-47F	MH-47D	MH-47E	MH-47G
DIMENSIONS	feet/meters							
Length, Rotors Operating	98'1.3"/ 29.9	98'11"/ 30.1	98'11"/ 30.1	98'11"/ 30.1	98'11"/ 30.1	98'11"/ 30.1	98'11"/ 30.1	98'11"/ 30.1
Length, Fuselage	50'9"/ 15.5	50'9"/ 15.5	50'9"/ 15.5	50'9"/ 15.5	50'9"/ 15.5	52'1"/ 15.9	52'1"/ 15.9	52'1"/ 15.9
Width (Fuel Tanks)	12'5"/ 3.8	12'5"/ 3.8	12'5"/ 3.8	12'5"/ 3.8	12'5"/ 3.8	12'5"/ 3.8	15'8"/ 4.8	15'8"/ 4.8
Height (Top of Aft Rotor Head)	18'6"/ 5.6	18'6"/ 5.6	18'6"/ 5.6	18'6"/ 5.6	18'6"/ 5.6	18'6"/ 5.6	18'6"/ 5.6	18'6"/ 5.6
Rotor Diameter	59'1.25"/ 18.0	60'0"/ 18.3	60'0"/ 18.3	60'0"/ 18.3	60'0"/ 18.3	60'0"/ 18.3	60'0"/ 18.3	60'0"/ 18.3
Wheelbase	22'10"/ 6.9	22'10"/ 6.9	22'10"/ 6.9	22'10"/ 6.9	22'10"/ 6.9	22'10"/ 6.9	25'10"/ 7.9	25'10"/ 7.9
Cabin Length	30'6"/ 9.3	30'6"/ 9.3	30'6"/ 9.3	30'6"/ 9.3	30'6"/ 9.3	30'6"/ 9.3	30'6"/ 9.3	30'6"/ 9.3
Cabin Width	7'6"/2.3	7'6"/2.3	7'6"/2.3	7'6"/2.3	7'6"/2.3	7'6"/2.3	7'6"/2.3	7'6"/2.3
Cabin Height	6'6"/2.0	6'6"/2.0	6'6"/2.0	6'6"/2.0	6'6"/2.0	6'6"/2.0	6'6"/2.0	6'6"/2.0
FUEL	gallons/liters							
Integral	621/ 2,350	621*/ 2,350	1100**/ 4,164	1034/ 3,914	1034/ 3,914	1034/ 3,914	2068/ 7,828	2068/ 7,828
Auxiliary (Max)	NONE	NONE	NONE	2,400/ 9,085	2,400/ 9,085	2,400/ 9,085	2,400/ 9,085	2,400/ 9,085
In-Flight Refueling	NO	NO	NO	NO	NO	YES	YES	YES
WEIGHTS	lbs/ kilograms							
Empty Weight	18,288/ 8,295	19,676/ 8,925	21,586/ 9,791	23,729/ 10,475	24,000/ 10,886	23,729/ 10,475	26,918/ 12,210	26,918/ 12,210
Design Gross Weight	28,550/ 12,950	33,000 14,969	33,000 14,969					
Maximum Gross Weight	33,000/ 14,969	40,000/ 18,144	46,000/ 20,865	50,000/ 22,680	50,000/ 22,680	50,000/ 22,680	54,000/ 24,494	54,000/ 24,494
PERFORMANCE	Knots/KMH Feet/meters Lbs/kilogram							
Max Cruise Speed	110/204	155/287	161/298	158/293	158/293	158/293	140/259	160/296
Maximum Speed	130/241	165/306		163/302	170/315	170/315	154/285	170/315
Cruise Speed (SL)	110/204	140/259	150/278	130/241	130/241	130/241	140/259	130/241
Service Ceiling	11,900/ 3,627	16,300/ 4,968	15,000/ 4,572	20,000/ 6,096	20,000/ 6,096	20,000/ 6,096	20,000/ 6,096	20,000/ 6,096
Single Hook Capacity	16,000/ 7,257	20,000/ 9,072	20,000/ 9,072	26,000/ 11,793	26,000/ 11,793	26,000/ 11,793	26,000/ 11,793	26,000/ 11,793
Forward or Aft Hook	--	--	--	17,000/ 7,711	17,000/ 7,711	17,000/ 7,711	17,000/ 7,711	17,000/ 7,711
ENGINES (SL)	Shp/kw							
Type	T55-L-7C	T55-L-7C	T55-L-11[xcv]	T55-L-712A	T55-L-714A[xcvi]	T55-L-712A	T55-L-714A	T55-L-714A
Maximum Power	2,850/ 2,125	2,850/ 2,125	3,750/ 2,796	3,750/ 2,796	4,867/ 3,629	3,750/ 2,796	4,867/ 3,629	4,867/ 3,629
Normal	2,400/ 1,790	2,400/ 1,790	3,300/ 2,461	3,000/ 2,237	4,168/ 3,108	3,000/ 2,237	4,168/ 3,108	4,168/ 3,108
Military Power (30 min)	2,650/ 1,976	2,650/ 1,976	3,750/ 2,796	3,400/ 2,535	4,527/ 3.376	3,400/ 2,535	4,527/ 3,376	4,527/ 3.376
Emergency	--	--	--	4,500/ 3,356	5,069/ 3,629	4,500/ 3,356	5,069/ 3,629	5,069/ 3,629
Rotor RPM	230	225/230	235/245	225	225	225	225	225

*CH-47B aircraft with crash-resistant fuel tanks had a 566 gallon/2,143 liter total capacity[xcvii]

**CH-47C aircraft with crash-resistant fuel tanks had a 1,036 gallon/3,922 liter total capacity[xcviii]

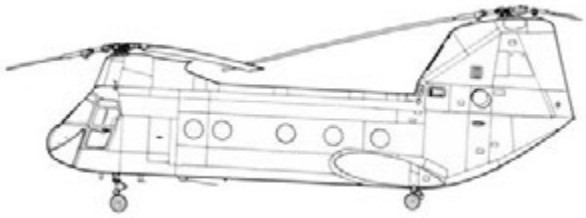
Specifications

Source: www.chinoook-helicopter.com		**CH-47A**	**CH-47B**	**CH-47C**	**CH-47D**
Performance (33,000lbs/Standard Atmosphere)					
Max Cruise Speed (Sea Level)	knots	**110**	**155**	**161**	**158**
Max Rate of Climb (Sea Level – 30 Min)	ft/min	**2,040**	**2,080**	**2,590**	**3,100**
Hover Out of Ground Effect Ceiling (10 min)	ft	**8,800**	**10,100**	**13,600**	**17,200**
Service Ceiling (1 Engine Inoperative-30min Rating)	ft	**2,000**	**n/a**	**8,500**	**12,800**
Mission Capability (30nmi Radius)					
External Payload Mission (Sea Level/59°F)					
Takeoff Gross Weight	lbs	**33,000**	**39,450**	**44,400**	**50,000**
Total Mission Fuel	lbs	**2,267**	**2,545**	**2,848**	**2,818**
Cruise Speed					
Outbound	knots	**100**	**100**	**100**	**126**
Inbound	knots	**130**	**132**	**137**	**135**
Payload	lbs	**11,063**	**15,847**	**18,566**	**22,686**
External Payload Mission (2000ft/70°F)					
Takeoff Gross Weight	lbs	**33,000**	**38,200**	**42,950**	**50,000**
Total Mission Fuel	lbs	**2,108**	**2,464**	**2,698**	**2,738**
Cruise Speed					
Outbound	knots	**100**	**100**	**100**	**112**
Inbound	knots	**120**	**140**	**140**	**137**
Payload	lbs	**11,222**	**14,698**	**17,266**	**22,766**
External Payload Mission (4000ft/95°F)					
Takeoff Gross Weight	lbs	**31,100**	**32,500**	**40,700**	**42,900**
Total Mission Fuel	lbs	**1,988**	**2,222**	**2,542**	**2,548**
Cruise Speed					
Outbound	knots	**92**	**100**	**100**	**101**
Inbound	knots	**103**	**144**	**146**	**140**
Payload	lbs	**9,442**	**9,220**	**15,172**	**15,856**

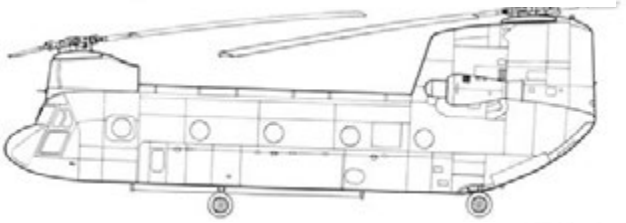
Specifications

Line drawings from *CH-47 Chinook in Action* by Wayne Mutza, courtesy of Squadron/Signal Publications, Carrollton, TX.

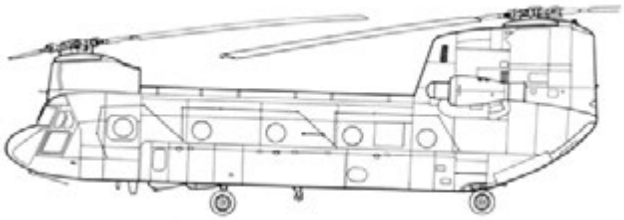
YCH-1A



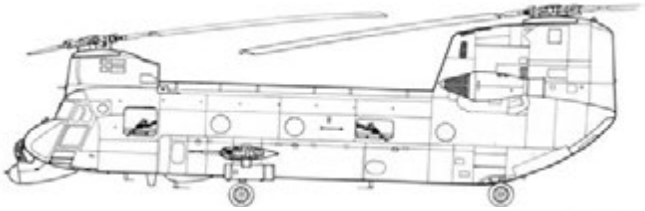
YCH-1B



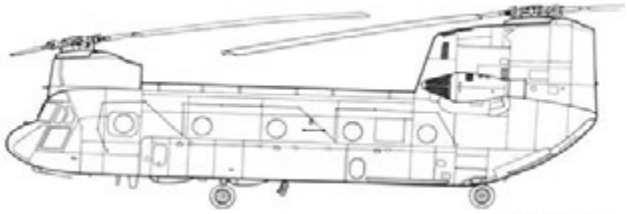
CH-47A



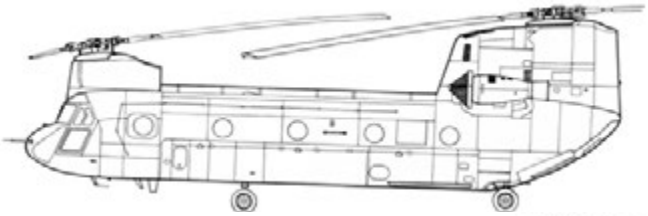
ACH-47A



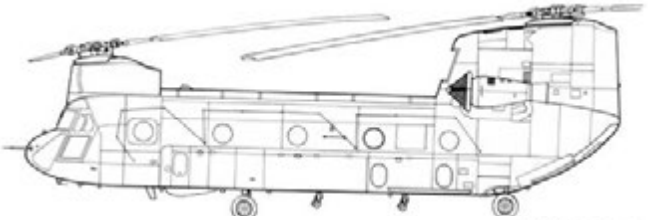
CH-47B



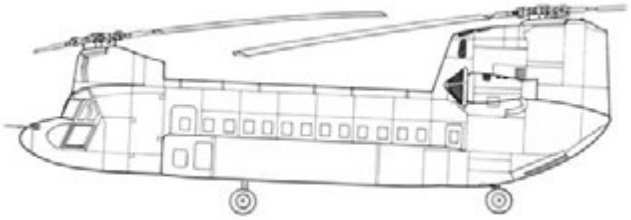
CH-47C



CH-47D



BV-234



Variants

ACH-47A	Gunship version of the aircraft. Four built and used extensively in Vietnam.
BV-234	Civilian version of CH-47C [see Model 234 below]
BV-234-68	Proposed stretched version of BV-234 with 66 passenger capacity
BV-307	Proposed civil variant almost double the size of the CH-47 with capacity for 225 passengers
BV-347	Heavily modified CH-47A with stretched fuselage, retractable gear and variable incidence wing
BV-360	(CH-46X) Advanced Technology Demonstrator using composites and a glass cockpit
CH-113	(Labrador) Royal Canadian Air Force version of the CH-46 designed for Search and Rescue
CH-113A	(Voyaguer) Canadian Army version of the CH-46 designed for medium-lift transport
CH-147	Canadian CH-47C Model fitted with a power hoist for rescue. Also called "Super C"
CH-147D	Canadian CH-47D Model
CH-46	(Sea Knight) Models A-F. Total of 524 Model 107 design built for the US Navy and Marine Corps starting in 1961. Retired by the Navy in 2004, it is still operated by the Marines.
CH-46X	(BV-360) Advanced Technology Demonstrator using composites and a glass cockpit
CH-47(-)	"Baby C" - Initial deliveries (106) of CH-47C with T55-L-7C engines; later upgraded to full C model standards with T55-L-11C engines.
CH-47A	First production model. Entered service in 1962 with gross weight of 33,000lbs
CH-47B	Introduced in 1966 with improved airframe and T55-L-7C engines
CH-47C	Developed in 1967 initially with T55-L-7C; later upgraded to T55-L-11 engines
CH-47D	Upgraded A, B and C models plus 3 new builds. Initially with T55-L-712 engines but later upgraded to T55-L-714. Triple hook system.
CH-47F	"Improved Cargo Helicopter" [ICH] Latest production model. Glass cockpit/re-engineered structure. Max gross weight 50,000lbs
CH-47F (EMD)	[YCH-47F] Three CH-47F aircraft Engineering and Manufacturing Development prototype aircraft converted from D models. Later inducted into F Model production line.
CH-47J	Japanese version of CH-47D manufactured in Japan by Kawasaki Industries
CH-47JA	Japanese version of CH-47D with enlarged fuel tanks; manufactured in Japan by Kawasaki Industries. Equivalent to the CH-47SD.
CH-47SD	“Super” D Model with larger fuel tanks built specifically for the Taiwanese Army.
GCH-47A	Temporary designation - grounded for engineer training (12 aircraft)
HC1 (HC MkI)	RAF version based on the CH-47C. Redesignated HC1B after rotor blade upgrade
HC-1B	[YCH-1B] Production versions of the Vertol Model 107-1 - later redesignated CH-47A
HC2 (HC MkII)	RAF upgrade of the HC1B to 47D standards
HC2A (HC MkIIA)	HC2 aircraft with strengthened fuselage and provision for refueling probe
HC3 (HC MkIII)	RAF Special forces version of the US MH-47E. Delivered but not certified for IFR flight and stored for several years. Eventually “upgraded” to HC2 standards
HC4 (HC Mk IV)	RAF upgrade of HC2/2A aircraft to roughly match CH-47F standards with Thales avionics suite
HC5 (HC Mk V)	RAF upgrade of HC3 aircraft to CH-47F standards but with Thales avionics suite
HC6 (HC Mk VI)	RAF version of CH-47F
HH-47	Boeing design for a US Air Force Combat Search and Rescue version of the MH-47G
HH-47D	Search and Rescue version of the Republic of Korea CH-47SD
HKP 4/4B	Swedish upgraded versions of the CH-46. Used by the Swedish Air Force and Navy

Variants

ICH	Improved Cargo Helicopter - later designated CH-47F
JCH-47A	Temporary “Joint” Air Force/Army designation for early A models
MH-47D	Special operations version
MH-47E	Special operations version with larger (2000gal) fuel tanks and in-flight refueling capability.
MH-47G	Special operations version with larger (2000gal) fuel tanks and in-flight refueling capability. Max gross weight 54,000lbs
Model 107/V107	[YHC-1A] Vertol tandem rotor prototype that became the CH-46/Model 107
Model 107-1/ V107-1	[YCH-1B] Vertol tandem rotor prototypes (upgraded Model 107) that became the CH-47. Army designation was Model V114
Model 114/V114	Army designation for Boeing Model 107-1
Model 227	Proposed Boeing Heavy Lift Helicopter design approximately twice the size of the CH-47
Model 234	Civilian model of Chinook based on CH-47C Model. Variations include 234LR (Long Range), 234ER (Extended Range -additional internal fuel tanks), MLR (Commercial Transport Version) and 234UT (Utility version)
Model 237	Proposed Boeing Flying Crane design approximately twice the size of the CH-47
Model 297	Proposed Boeing Flying Crane design with three turbine engines
Model 298	Proposed Boeing design for a large heavy-lift helicopter
Model 299	Proposed Boeing design for a very large heavy-lift helicopter
Model 301	(XCH-62) Civil version of the Prototype Heavy Lift Helicopter
Model 307	Proposed civil variant almost double the size of the CH-47 with capacity for 225 passengers
Model 414	International Export version of the CH47C/D
XCH-62	(Model 301) Prototype Heavy Lift Helicopter (HCH)
YCH-47A	Redesignation of YHC-1B prototype aircraft
YCH-47D	One each A, B and C model converted to D model prototypes
YCH-47F	[CH-47F (EMD)] Three CH-47F aircraft Engineering and Manufacturing Development prototype aircraft converted from D models. Later inducted into F Model production line.
YHC-1A	Three initial prototypes based on the Vertol Model 107. Later developed as the CH-46
YHC-1B	[HC-1B] Five initial prototypes based on Model 107-1. Also HC-1B. Redesignated CH-47A

H-47 Fleeet Disposition as of 01 Nov 2012

	CH-47A	CH-47B	CH-47C	CH-47D	CH-47F	MH-47D	MH-47E	MH-47G	TOTALS
PROTOTYPE BUILDS	**6**			**3**	**3**				**12**
Tested to Destruction	2								2
Museum Exhibits	2								2
Salvaged/Attritted	2								2
Converted to Trainer				1					1
Converted to D Model				2					2
Converted to F Model					3				3
	CH-47A	**CH-47B**	**CH-47C**	**CH-47D**	**CH-47F**	**MH-47D**	**MH-47E**	**MH-47G**	**TOTALS**
PRODUCTION BUILDS (01 Nov 12)	**349**	**108**	**288**	**444**	**210**	**12**	**26**	**62**	**1499**
In-Service Active Duty				55	148			57	260
In- Service Guard				133	51			0	184
In- Service Reserve				42	0			0	42
In-Service Depot				6	2			2	10
In-Service Total				***236***	***201***			***59***	***496***

Converted to D Model	164	75	200	2					441
Converted to D Model Prototype	1	1	1						3
Converted to F Model Prototype				3					3
Converted to BC-347	1								1
Converted to MH-47D	6		6						12
Converted to MH-47E			26						26
Converted to MH-47G				39		5	18		62
Converted to Trainer				19					19
Inducted to F Model Program				93	3	4			100
Pending Conversion to G Model							3		3
Transferred to VNAF	71								71
Captured by North Korea			1						1
Sold to Australia				2					2
Sold/Leased to Canada				7					7
Sold to Thailand	2								2
Sold to UAE					2				2
Sold to United Kingdom	1	1							2
On Display (CONUS)	5								5
On Display (Vietnam)	3								3
On Display (China)	1								1
Lost to Accidents (SEA)	45	13	21						79
Lost to Accidents (Iraq)				10					10
Lost to Accidents (Afghanistan)				13	5	1	1	2	22
Lost to Accidents (CONUS)	11	4	8	14			1	1	39
Lost to Accidents (OCONUS)	3	1	9	2		1	1		17
Lost to Enemy Action (SEA)	34	13	15						62
Lost to Enemy Action (Iraq)				1					1
Lost to Enemy Action (Afghanistan)				6	2	1	2		11
Tested to Destruction	3		1						4
Salvaged/Attritted	4								2
Sub Total	**349**	**108**	**288**	**209**	**9**	**12**	**26**	**6**	**1015**
TOTAL PROTOTYPE & PRODUCTION	**355**	**108**	**288**	**447**	**213**	**12**	**26**	**62**	**1511**

Tandem Helicopter Timeline

April	11	1943	First flight of Piasecki PV-2 [Second successful helicopter flight in US]
March	7	1945	First flight of XHRP-X prototype Piasecki PV-3 Rescuer (HRP-1)
		1946	P-V Engineering Forum becomes Piasecki Helicopters
August	15	1947	First flight of production Piasecki HRP-1 Rescuer
March		1948	First flight of prototype Piasecki HUP-1 Retriever
April	11	1952	First Flight of prototype Piasecki YH-21A Workhorse
October		1953	First flight of Piasecki H-21A Workhorse
		1953	First delivery of Piasecki H-25A Mule to US Army
		1953	Delivery of first prototype Piasecki YH-16 Transporter
August		1954	First delivery of Piasecki H-21C Shawnee to US Army
		1956	Piasecki Helicopters renamed Vertol Aircraft Company
July	22	1957	Vertol presentation to US Army on development of tandem rotor helicopters
March	31	1958	Roll-out of first demonstrator Vertol 107 (YHC-1A) N-74060
April	22	1958	Vertol prototype V-107 (YHC-1A) first flight
June	25	1958	Invitation for a General Management Proposal for the US Army Medium Transport Helicopter
June	26	1958	Contract awarded to Vertol for ten YHC-1A aircraft based on V-107 design
March	4	1959	Joint Source Selection Board recommends Boeing Vertol for Weapons System SS47IL
June		1959	Contract awarded to Vertol for five airframes, and initial testing of YHC-1B
July		1959	Roll-out of first prototype YHC-1A/YCH-46A (58-05514)
August	27	1959	First flight of YHC-1A/YCH-46A (58-05514)
March	15	1960	Boeing Vertol Aircraft Detail Specification (Report No. 114-X-01) issued
March		1960	Vertol becomes a division of Boeing
April		1960	Vertol Aircraft is acquired by Boeing and becomes Vertol Division of Boeing
April	28	1961	First prototype YHC-1B/YCH-47A (59-04982) rolled out (but not delivered to US Army yet)
May	18	1961	Boeing Vertol Aircraft Detail Specification (Report No. 114-X-201) issued
June		1961	Second prototype YHC-1B/YCH-47A (59-04983) rolled out
July	12	1961	First prototype YHC-1B/YCH-47A (59-04982) damaged in ground accident
September	21	1961	Second prototype YHC-1B/YCH-47A (59-04983) hovers for the first time - first Chinook to fly
October	19	1961	YHC-1/YCH-47A (59-04893) first official flight
December		1961	H-21 Helicopters arrive in Vietnam/First airmobile combat action (Operation CHOPPER)
		1961	Boeing Vertol receives second production contract for additional 18 HC-1Bs
April	26	1962	Fourth prototype YCH-47A (59-04985) delivered to US Army
June	6	1962	Fourth prototype YCH-47A (59-04985) starts climatic tests at Eglin AFB
July		1962	First casualties of the Vietnam War - H-21C Shawnee shot down
July		1962	DoD designates the prototype YHC-1B aircraft as YCH-47A and production aircraft as CH-47A
August	16	1962	Third production aircraft 60-03450 is the first CH-47A delivered to Fort Rucker, AL
August		1962	First flight of production CH-46A
September	4	1962	YCH-47A 59-04985 completes climatic tests at Eglin AFB
October	26	1962	YCH-47A 59-04982 finally delivered to the Army after Boeing testing

Tandem Helicopter Timeline

December	8	1962	Last of the initial production aircraft (60-03451) is delivered to the US Army
February	1	1963	Last (of 5) prototype YCH-47A delivered to US Army
April	8	1963	First production CH-47A (60-03448) delivered to US Army
June		1963	First operational deployment of CH-47A
August	10	1963	First parachute jumps from CH-47A
June	29	1963	Fifth and final prototype YCH-47A (59-04986) delivered to US Army
June	27	1964	CH-21 formally retired
March		1964	First operational deployment of CH-46A
March	19	1965	60-03450 destroyed in testing accident - the first CH-47A lost.
July	19	1965	First accident loss of CH-47A (60-03450) - Alabama
October		1965	First delivery of UH-46A to US Navy
November	6	1965	First Flight of prototype ACH-47A 64-13145
November	10	1965	Official roll-out of first ACH-47A 64-13145
December	30	1965	Four ACH-47As delivered to the US Army
		1965	Boeing Vertol builds an Assembly Center
January	29	1966	First combat loss of CH-47A (63-07913) in Vietnam
June	26	1966	Operational Deployment of three ACH-47As to Vietnam
August		1966	First ACH-47A (64-13151) accident loss in Vietnam
September	9	1966	59-04984 configured as CH-47B test bed with Lycoming T55-L-7C engines
September		1966	First delivery of CH-46D
May	5	1967	Second ACH-47A (64-131450 accident loss in Vietnam
May	10	1967	First CH-47B (66-19098) delivered to US Army
May	12	1967	Last CH-47A (66-19097) delivered to US Army
October	14	1967	First flight of prototype CH-47C (67-18494)
December		1967	First CH-47B deployed to Vietnam
February	22	1968	Third ACH-47A 64-13154 combat loss in Vietnam - ACH-47A missions terminated
February	28	1968	Last CH-47B (67-18493) delivered to US Army
March	30	1968	First CH-47C (67-18494) delivered to US Army
July		1968	First delivery of CH-46F to USMC
September		1968	First CH-47C deployed to Vietnam
		1968	CH-47 production licensed to Elicotteri Meridionali SpA (EMSA
February		1969	First CH-47A deployed to Alaska
July		1969	First CH-47A deployed to Korea
		1969	CH-47 officially designated "Chinook"
May	27	1970	First flight of Boeing Model 347 (formerly CH-47A 65-07992)
August		1970	First CH-47A deployed to Europe
December	17	1972	First export delivery of CH-47C to Australia
		1973	Canadian Armed Forces orders 8 CH-147 (improved CH-47C)
December	4	1974	LTC James Hesson named first Project Manager for the CH-47 Modernization Program
July	15	1975	Office of the Project Manager CH-47 Modernization Program effective date
July	14	1977	CH-47C 67-18498 shot down/captured in North Korea

Tandem Helicopter Timeline

January		1978	Royal Air Force purchase of 33 HC Mk1 aircraft
March	6	1978	Roll-out of first YCH-47D prototype (65-08008)
May	22	1978	First flight of fiberglass rotor blades on CH-47B 74-22287
May	11	1979	First YCH-47D prototype (65-08008) flight
		1979	First civil verion of the Chinook (Model BV234) placed in service by British Airways
July	29	1980	First aircraft (CH-47C 68-15847) inducted to CH-47D upgrade program
September	30	1980	First delivery of HC Mk 1 aircraft to RAF
October	30	1980	Spanish Army orders 3 CH-47D aircraft
June	19	1981	FAA certification of Boeing Model 234 - civilian version of the CH-47C
February	26	1982	First production CH-47D flight
May	20	1982	First CH-47D delivered to US Army
February	28	1983	First delivery of CH-47D to operational unit
May	26	1983	First delivery of MH-47D (82-23763)
May		1983	FAA certification of Boeing Model 234LR (Long Range)
February	28	1984	Initial Operational Capability (IOC) of CH-47D at Ft Campbell, KY
August	15	1985	Last CH-47C (85-24744) delivered to US Army
		1985	CH-47 production licensed to Kawasaki Heavy Industries in Japan
July	4	1986	First flight test of CH-47J produced by Kawasaki
June	10	1987	Boeing Vertol 360 Advanced Technology Demonstrator first flight
November	19	1987	Last CH-47A (63-07921) inducted into CH-47D program
		1987	Boeing Vertol name changed to Boeing Helicopters
September		1988	First CH-47D delivered to an Army Guard unit (Texas)
May	31	1990	First flight of MH-47E (88-00267)
July	31	1990	Last MH-47D delivered (89-00161)
May	10	1991	First delivery of MH-47E (88-00267)
November	25	1992	60-03449 is the last airframe to be inducted into the D model program
January	17	1994	Third Prototype YCH-1B/YCH-47A (59-04984) delivered to US Army
May	16	1995	Last delivery of MH-47E (92-00477)
March	4	2002	First combat loss of CH-47 (92-00471) in Afghanistan
May	15	2002	First prototype YCH-47F delivered to US Army
June	26	2002	Last CH-47D (98-00200) "Mr Potato" delivered
November	3	2003	First combat loss of CH-47 (91-00230) in Iraq
May	19	2004	First MH-47G delivered to US Army
June	15	2006	First production CH-47F (05-08701) rolled out
October	23	2006	First production CH-47F (04-08701) flight
November	17	2006	First delivery of CH-47F (05-08010) to US Army
August		2007	First Unit Equipped with CH-47F (Ft Campbell)
July	22	2010	Delivery of 100th CH-47F (07-08741)
February	10	2011	Last MH-47G (09-03787) delivered to US Army

Three CH-47 F aircraft in formation near Devils Tower, SD [aircraft are above the tower]

CH-47D, CH-47F and MH-47G in formation over the US Space and Rocket Center in Huntsville, Alabama

Chinook Trivia

What is the Chinook named after?

In keeping with Army policy of naming aircraft after Native American tribes, the CH-47 was named after the Chinook Indians who lived along the Columbia River in the Pacific Northwest. Oddly enough, the Chinook tribe was granted official recognition by the US Bureau of Indian Affairs on 4 January 2001 only to have that decision reversed the following year. A new bill, H.R. 3084, The Chinook Nation Restoration Act was introduced in May of 2009, was referred to Committee but died without being enacted at the end of the 111th Congress.

How many Chinooks have been built (so far)?

It depends on how you count them. As of November 2012, a total of 1511 US Army aircraft had been designated as a YCH or CH-47A, B, C, D, F, MH-47D, E or G [but only 1510 were given tail numbers] . All A, B and C models were "new builds". All D models (except 3 new builds) were converted A, B or C models. All F models are completely new airframes but about 40% of F Models are "remanufactured" – new fuselages but using the dynamic components from D models. The rest of the F models are completely new. Some aircraft have been A models converted to D models and then upgraded to MH-47Gs. All the MH-47G aircraft are converted from earlier models. Approximately 300 Chinooks have been built for other countries and 13 commercial models were manufactured. A total of 496 aircraft (D, F, G) are currently (as of 1 November 2012) flying in the US Army, National Guard and Army Reserve and there are 10 commercial models flying.

How many of each model have been built for the US Army?

Counting prototypes which were assigned new tail numbers and one prototype (B006) that was not given a tail number:

CH-47A – 355 (All new builds)
CH-47B – 108 (All new builds)
CH-47C – 288 (All new builds)
CH-47D – 447 (444 remanufactured A, B and C models/3 new builds)
CH-47F – 213 [as of 1 November 2012] (all new airframes)
MH-47D – 12 (all remanufactured A and C models)
MH-47E – 26 (all remanufactured C models)
MH-47G – 62 (all remanufactured D, MH-D and MH-E models)
TOTAL 1511 [As of 01 November 2012]

Chinook Trivia

How many flight hours did the first Chinook prototype [59-04982] accumulate?

None. 59-04982 was damaged during a ground run and never flew. It was used for static and ballistic testing.

What was the other Chinook that never flew?

Build 006 was built as a static test article and never was intended to fly and therefore was not issued a tail number.

What early tandem-rotor helicopter was featured on a Viet Cong postage stamp?

In 1963, to honor the third anniversary of the founding of the Viet Cong, a postage stamp was issued showing VC soldiers shooting down a CH-21 Shawnee. This stamp was featured on the cover of Life magazine on 26 February 1965. The CH-21 was the first tandem-rotor helicopter to serve in Vietnam and was active from 1961 until replaced by the CH-47 Chinook.

How did the Viet Cong describe the CH-21 Shawnee in a 1963 captured document?

"The [helicopter] type used to carry troops is very large and looks like a worm. It has two rotors and usually flies at an altitude of 200-300 meters. To hit its head, lead by either one length or two-thirds of a length when it flies horizontally" This guidance proved unproductive when a CH-21 pilot dropped onto a landing zone only to see a Viet Cong squad debouch from the trees and open fire at point blank range. Convinced of the necessity to 'lead' the helicopter, they poured their fire into the ground twenty yards in front of him and he took off without a single hit.[xcix]

Has the United States ever issued a Chinook stamp?

No. The US Postal Service has issued more than one hundred aviation stamps but only two with a helicopter – the 1988 airmail stamp honoring Igor Sikorsky and the 1999 Vietnam War stamp. The only Chinook that has appeared on a US stamp is "custom postage".

Chinook Trivia

What is "custom postage"?

Zazzle (www.zazzle.com) now offers custom US postage with a photo or drawings of a Chinook.

What other countries have featured the Chinook on their postage stamps?

Cambodia, British Virgin Islands, Vietnam, Ascension Island, Palau, and the Falkland Islands

What is unique about the D model serial number 88-00084?

D models 88-00062 to 00083 and 88-00085 to 000109 were built and SN 88-00084 was initially assigned to the conversion of CH-47C 68-15838. While on the assembly line, that aircraft was selected to become the MH-47E prototype 88-00267 so the D model 88-00084 was never produced.

How many D Models were "new builds"?

Three - [92-00367, 92-00368 and 98-02000 (AKA Mr. Potato Head)]. All other D Models were converted from A, B and C Models.

How many F Models are "new builds"?

Approximately 60%% of the F models produced so far are complete "new builds". Unlike the D models, the other "remanufactured" F models have completely new fuselages and are built with parts/equipment recovered from D models.

Is there any way to tell the F Model "new builds" from "remanufactured"?

There is no difference in outward appearance. The tail numbers, however, mark the aircraft as one or the other. Aircraft with tail numbers starting with 080 or 081 (e.g. 05-08012) are "remanufactured" and those starting with 087 or 088 are "new builds".

What is the oldest Chinook still flying? [as of 1 November 2012]

The oldest Chinook still flying is an A model that was converted to a D model and is still serving in the Washington National Guard (no F models use old airframes). There are actually two candidates for this honor. CH-47D 91-00261 was originally CH-47A 61-02409, the 13th H-47 built. It was accepted by the Army on 9 January 1963, accumulated 2,463 hours as an A model, was placed in storage at the Military Aircraft Storage and Disposition Center (MASDC) from 1978 to 1991 when it was inducted into the D model program. 91-00261 was delivered to the Army on 4 September 1992. From the date of acceptance, this is the oldest Chinook still flying. CH-47D 92-00309 was originally CH-47A 60-03449 and was the 8th Chinook built by Boeing Vertol. For reasons that are not clear, the aircraft was not accepted by the Army until 20 February 1963, almost six weeks after 61-02409. 60-03449 accumulated only 275 hours as an A model and was the last A model to be placed in MASDC from 1988 to 1992 when was the last A model to be inducted to the D model program on 25 November 1992. 92-00309 was delivered to the Army on 28 February 1994 and is still flying with the Nevada/Montana National Guard. Arguably, it is the oldest Chinook that was built still flying but until the aircraft is accepted by the Army, it hasn't technically begun its life.

Are there any other transport aircraft from the 1960s still in production in addition to the Chinook?

The Air Force C-130 first flew in 1958 and the C-130J is still in production.

Chinook Trivia

What is the fastest US Army helicopter?

Believe it or not, it is (and always has been) the Chinook. With a top speed of 170 knots or 196 mph for the CH-47F, it is 17 knots faster than the Apache and 11 knots faster than the Blackhawk. The AH-64D Apache Maximum Level Flight Speed is 153 knots or 176 mph according to the Boeing data sheet dated March 2012. The UH-60L Blackhawk has a maximum speed of 159 knots or 183 mph. At higher altitudes, the CH-47 performance difference is even more pronounced compared to any tail-rotor helicopter.

Where are the six surviving CH-47A models on display in the United States?

59-04984 Ft Eustis VA

59-04986 Waverly Hall GA

60-03451 Ft Rucker AL

61-02408 Ft Campbell KY

64-13149 “Easy Money” Redstone Arsenal AL

65-07992 Converted to BV347 Ft Rucker AL

Chinook Trivia

Where are the other four (captured) CH-47A aircraft displayed overseas?


65-08025 Khe Sahn Vienam


66-00086 Ho Chi Mihn City Vietnam


66-00082 Hanoi Vietnam


66-00094 Datangshan China

What happened to some of the first Chinooks that were built?

B001 – 59-04982 – first prototype; damaged; never flew; tested to destruction
B002 – 59-04983 – first to fly; used as maintenance trainer; sold to civilian company; cockpit section used for RAF simulator
B003 – 59-04984 – used as maintenance trainer; sold to civilian company; sold back to Ft Eustis Transportation Museum for restoration
B004 – 59-04985 – used for extreme weather testing; attrited in 1986;
B005 – 59-04986 – used as maintenance trainer; sold to civilian organization; fuselage on display in Waverly, GA
B006 – N/A – built as ground test aircraft; never flew; tested to destruction
B007 – 60-03448 – first production aircraft; used as maintenance trainer; attritted;
B008 – 60-03449 – converted to D Model 92-00309; assigned to Nevada/Montana NG
B009 – 60-03450 – first A model delivered to Army unit; destroyed in accident
B010 – 60-03451 – on display at Ft Rucker museum
B011 - 60-03452 - attritted, no details available
B012 - 61-02408 - on display at Ft Campbell museum
B013 - 61-02409 - converted to D model 91-00261; assigned to the Washington NG
B014 - 61-02410 - converted to D model 91-00265; assigned to the Iowa National Guard
B015 - 61-02411 - first Army CH-47A lost to accident 29 Jan 1964 [Earlier loss was not yet accepted by the Army]

Chinook Trivia

What is the glow on the rotor blades?

The visible halo over the Chinook in the photo is called the Kopp-Etchells effect and is caused by sand particles hitting the titanium abrasion strips on the leading edge of the rotor blades. The effect was named in honor of fallen soldiers Corporal Benjamin Kopp (US Army) and Corporal Joseph Etchells (British Army). Reporter Michael Yon took the photo in Afghanistan and named the phenomenon.

Why is 98-02000 called "Mr. Potato Head"?

98-02000 was assembled from "left-over" parts at the Boeing plant. It was the last D Model produced and was delivered to the Army 26 June 2002, almost seven years after the end of the regular production run which delivered 93-00934 on 22 December 1995.

How many A Models were stored at the Military Aircraft Storage and Disposition Center at Davis Monthan AFB prior to being converted to D Models?

30 [Actually, there were 31 CH-47A inductions to MASDC but one aircraft [61-02421] was stored, returned to service and stored a second time]. The aircraft were placed in storage starting in 1975. Over the period 1983-1994, all 30 aircraft were removed from storage and upgraded to D models.


CH-47As in storage at MASDC

Where is the forward fuselage section of CH-47D 83-24105 on display?

At the RAF Museum in London in the exhibit celebrating the famous RAF Chinook [HC2 ZA718] "Bravo November" and its Distinguished Flying Cross Falkland Islands and Afghanistan exploits.

Chinook Trivia

Was the Chinook ever used as a weapons delivery system?

The ACH-47A gunships used in Vietnam (Guns-a-go-go) were the only Chinooks specifically designed as a weapons delivery system and were quite successful. The standard Chinook was used occasionally in Vietnam as a "bomber" to deliver drums of napalm and tear gas from the rear cargo ramp.

The ACH-47A gunship "Cost of Living" had a different name when it first arrived in Vietnam – what was it?

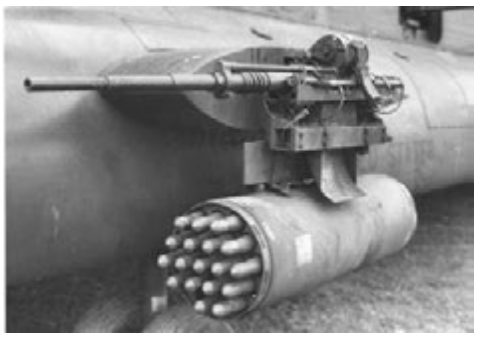
64-13145 was originally called "Crazy 8". It is not known why the name was changed

Where is the only surviving ACH-47A "Guns-a-go-go" aircraft on display?

Redstone Arsenal, Alabama

ACH-47A "Easy Money"

What was the armament on the ACH-47A gunships?



Probably the most heavily armed helicopter in the world, the four ACH-47A gunships carried a 40mm grenade launcher, two 20mm cannons, two 2.75-inch rocket launchers plus five crew-operated 50-caliber machine guns. The standard ammunition load was 500 rounds of 40mm, 800 rounds of 20mm, 38-2.75in rockets and 5,000 rounds of 50-caliber. One enterprising flight engineer mounted twin 7.62mm M-60 machine guns in the cargo hatch to allow firing directly below the aircraft.

CH-47 helicopters have been manufactured in which two countries under license?

Italy - CH-47C by Elicotteri Meridionali (nowAugustaWestland) and Japan - CH-47J/JA by Kawasaki Industries (now Kawasaki Heavy Industries Aerospace Company

Chinook Trivia

Many Chinooks were lost to enemy action in Vietnam, Iraq and Afghanistan. What were the details of a CH-47C that was shot down by North Korea?

67-18498 strayed across the DMZ and landed to check for damage after shots were fired by the South Korean Army to warn the crew that they were headed toward North Korea. After taking off, the aircraft was shot down by a North Korean MiG-21 Fishbed[c] and three of the four crewmen were killed.

What highly modified CH-47A is on display at Ft Rucker?

The aircraft known as BV-347 was a CH-47A [65-07992] before undergoing extensive modification as an advanced technology demonstrator. The aircraft was "stretched" by 110 inches, had retractable landing gear, a four blade rotor system and, most notably, a hydraulically actuated wing mounted on top of the fuselage.

BV 347

How many Chinooks were lost in the Vietnam War?

79 US Chinooks were lost to accidents and 62 were lost to enemy action in Vietnam, Laos and Cambodia. The Vietnamese Air Force (VNAF) lost 6 to accidents, 36 to enemy action and 33 were captured by the North Vietnamese Army (NVA) at the end of the war. Four of the captured aircraft are on display at museums in Vietnam (Ho Chi Minh City (Saigon), Khe Sanh, Hanoi) and an Air Museum in China.

What is the back story on the last US Army Chinook lost in Vietnam?

CH-47C 67-18529 was shot down by ground fire on 16 Feb 1973 – three weeks after the signing of the peace accord that ended US combat involvement in the Vietnam War. The normally marked aircraft was on a peacekeeping supply mission for the Joint Military Commission but was a replacement for one that was specially marked with orange zebra stripes to identify it as part of the Commission. One crew member, SP5 James Scroggins, died as a result of burns suffered in the crash of the aircraft and was the last Army Aviation crewman killed in action in Vietnam. SP5 Scroggins had received the Distinguished Flying Cross a few months earlier for his use of a flare to disrupt a heat-seeing missile fired at his aircraft.

Chinook Trivia

What was the official term for Small Arms fire in the combat incident reports from the Vietnam War?

"Gun launched non-explosive ballistic projectiles less than 20mm in size (7.62MM or 12.7MM)"

For the record, here are some other definitions:

Explosive Weapon - Non-Artillery launched or static weapons containing explosive charges (RPG, MORTAR, MINE or ROCKET)

Anti-Aircraft Artillery – Gun launched explosive ballistic projectiles equal to or greater than 20MM in size (20MM)

What company "borrowed" eight CH-47C models during the Vietnam War (and returned them all in flying condition)?

Air America – a passenger and cargo "airline" owned and operated by the Central Intelligence Agency (CIA)

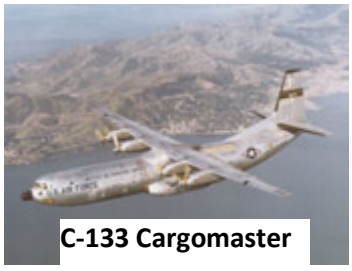
What was the most expensive load carried by a Chinook?

In 2004, three Chinooks carried a total of $1.7billion in $100 bills from one location to another in Iraq. That was about $566 million and 14,000 pounds per helicopter.


Approximately $566 million

What was the most unusual accident involving a CH-47?

CH-47C 67-18787 was enroute in the cargo hold of an Air Force C-133 Cargomaster aircraft when that aircraft crashed after an explosive decompression of the transport plane's cabin.


C-133 Cargomaster

Chinook Trivia

What was the largest helicopter in the world in 1953?

The Piasecki YH-16 "Transporter" which had a max takeoff weight of 33,600lbs and a useful load of about 11,000lbs.

What is the largest helicopter in the world today?

The Mil Mi-26 "Halo". With its 105ft 8-blade rotor, it has a max gross takeoff weight of 123,450lbs and a usefull load of about 44,000lbs. The size comparison with the Chinook is shown in this photo

What was the largest helicopter ever built?

The Mil V-12 [would have been called the Mi-12 "Homer" if it had gone into production], first flew in 1968 and had a two-rotor transverse system similar to that seen on the first successful tandem helicopter, the Fw 61. Two V-12 prototypes were built. The aircraft had a maximum gross takeoff weight of 231,850lbs and an *internal* payload of 55,000lbs in the VTOL mode. Each of the twin rotors had a diameter of nearly 115ft. Originally designed for rapid deployment of strategic missiles, the aircraft was too big and difficult to maneuver. Both prototypes were flown successfully but were taken out of service in 1974.

Chinook Trivia

Which Chinook has the distinction of (safely) completing a complete snap roll and then being used for tests which inadvertently resulted in the destruction of the aircraft?

That would be CH-47D 84-24156 which rolled inverted due to unknown causes, recovered and landed damaged but safely. The aircraft was subsequently being used for ballistic tests but went into ground resonance as the engines were started for the tests. The aft pylon was ripped off the aircraft and no live fire testing was actually performed.

What other Chinook accident involved an aircraft that was not actually flying under its own power?

CH-47A 62-02125 was being carried as a sling load under another Chinook at Lawson Army Airfield in 1964 when load vibrations force the crew to release the load at about 800 ft. The "load" was flattened significantly by the force of the crash.

What happens if a Chinook loses power on one engine?

The engines are linked and a single engine can provide enough power to drive both rotors and maintain flight.

Why does the Chinook only have one wheel on each of the aft landing gear instead of two like the forward gear? [ci]

The first 75 Chinooks had small, dual *hard rubber* wheels which had a tendency to sink into hot asphalt parking areas. The design was changed to a single aft inflatable wheel (matching the ones on the forward gear) - the dual *inflatable* wheels were not required since the forward gear supported more of the aircraft weight. There are only two remaining aircraft with dual aft landing gear - 60-03451 [at Ft Rucker] and 61-02408 [at Ft Campbell.

Early CH-47A Aft Landing Gear (hard rubber)

Chinook Trivia

How can you tell the difference between an A model and the other models?

The A Model has a unique aft pylon with a pointed aft section and also does *not* have the strakes along the lower rear portion of the fuselage.

CH-47A

CH-47D

How can you tell the difference between a D model and the A, B and C models?

The D model has a large opening at the leading edge of the aft pylon for the transmission cooling assembly [also on the F, MH-D, E and G]. The D and later models also have a triple hook system.

CH-47D

CH-47A, B, C

How can you tell the F model from the other types?

The paint job is a dead giveaway but other than that, the dual pitot tube on the starboard side of the nose is unique to the F.

CH-47F Dual Pitot Tube

What was the story behind the last VNAF Chinook lost in Vietnam?

CH-47A 66-00081 had been transferred to the Vietnamese Air Force in February of 1972. On the 30th of April 1975 as Saigon fell to the North Vietnamese Army, many VNAF pilots used their assigned aircraft to save their families. Ba Nguyen flew his family of ten on 66-00081 off the coast of South Vietnam to the USS Kirk, a US Navy Destroyer Escort. Unable to land on the fantail because of the size of the helicopter, Nguyen hovered over the ship as the family jumped (or in the case of his 10month old daughter, was thrown down) safely to the deck of the ship. Nguyen then landed the aircraft in the water next to the ship, took off his flight suit (which had thousands of dollars in small gold bars sewn in) threw it into the water and escaped the sinking aircraft, and swam to the ship in just his skivvies. He and his family were broke but safe.

Chinook Trivia

How many golf balls would it take to fill a CH-47?

According to Boeing engineers, the answer is 180,000![cii] [Given that a regulation golf ball has a diameter of 1.680 inches, it has a volume of 2.4827 cubic inches [$V = 4/3\pi r^3$]. The cargo cabin of a CH-47 is 1,474 cubic feet or 2,547,072 cubic inches. At a 100% packing factor, it would take 1,026,217 golf balls to fill the cabin (and they would weigh 103,904lbs). A more reasonable packing factor of about 65% would take *only* 667,041 golf balls weighing approximately 67,538lbs.] Boeing's estimate of only 180,000 might have included the balls in sleeves and original boxes.

What movie featured Angelina Jolie being dropped off in Siberia by CH-47 aircraft?

Lara Croft: Tomb Raider, 2001

What recent movie featured a Chinook supporting a SEAL team extraction?

Act of Valor, 2012

Chinook Trivia

Can the CH-47 land and take off from the water?

Yes, it can. Amphibious operations have been part of tandem helicopter operations since the HUP.

What were the dates for the first delivery of each Chinook production model?

CH-47A – 06/29/1962 [60-03450]
CH-47B – 05/10/1967 [66-19098]
CH-47C – 03/29/1968 [67-18495]
CH-47D – 3/31/1982 [81-23381]
CH-47F – 11/30/2006 [04-08701]
MH-47D – 5/26/1983 [82-23763]
MH-47E – 5/10/1991 [88-00267]
MH-47G – 5/19/2004 [00-02160]

Is there actually a beer called "CH-47"?

Actually, it is an ale and is called CH-47 Pale Ale by Fegley's Brewworks in Pennsylvania and is only available at their Bethlehem Brew Works location. Here is their description of the ale: "A hefty sling load weight of Chinook hops gives this beer its distinctive bite, Chinook and Amarillo hops contribute to its citrus like aroma".

Chinook Trivia

Can you spot the Bow Tie that has always been a part of the CH-47?

What is the maximum airspeed for the CH-47 sideways or backward?

According to the -10, the maximum airspeed in "sideward" and "rearward" flight is 45 knots

What was the first overseas deployment of the CH-47F?
In February 2008, four CH-47F aircraft were deployed to Liberia to support President Bush's visit to Africa.

Chinook Trivia

What is this Chinook sling load?

This is the roof section of the central parlor of the new Mustang Ranch at the Wild Horse Adult Resort & Spa near Reno, Nevada. The aircraft belongs to Columbia Helicopters. Additional comments about hookers would be redundant.

Has a CH-47 ever been used to tow a water skier?

As unbelievable as it may sound, the answer is yes. Scott Burke, a Chinook Instructor Pilot at Fort Rucker was photographed being pulled across Lake Tholocco by a CH-47 sometime in the 1960's. The photograph and an article about the event (which was approved by the Commanding General) appear on the www.chinook-helicopter.com website. According to the article, Burke skied behind the Chinook holding onto a long rope and holding a "very wet and heavy sandbag" that would keep the rope out of the rotors in the event that he fell down. Aside from going airborne for a few seconds during a turn, everything apparently went without incident.

Chinook Trivia

What other heavy lift helicopter served in Vietnam?

Sikorsky CH-54A and B models (Tarhe) were available to be used as "flying cranes" in Vietnam (only 61 A models and 28 B models were built for the US Army and not all were deployed). With a sling load lifting capacity of 20,000 lbs (A model) and 24,000 lbs (B model), these aircraft were used by three heavy helicopters companies during the war. In addition to sling loads like downed aircraft, bulldozers, tanks and artillery pieces, the CH-54 was occasionally used to drop the 10,000lb M121 and 15,000lb BLU-82 "daisy cutter" bombs used to "create" helicopter landing zones (see photo). This mission was labeled "mine-laying" by the Army to avoid protests by the Air Force about bombing missions[ciii]. [Author's note: this mission was later assumed by Air Force C-130 aircraft using aerial delivery platforms rigged with cargo parachutes to drop the bombs]. Nine CH-54's were lost in Vietnam.

How much did a Chinook cost back in the days of the Vietnam War?

According to the Army Aviation Directorate (ASSFOR) in 1969, the CH-47C cost $1.5 million. The CH-54A cost was listed at just over $2 million. For comparison purposes, the UH-1H cost $307,000 at that time.

What famous real estate tycoon owned two civilian versions of the CH-47 and used them to shuttle his clients from New York City to casinos in New Jersey?

Donald Trump

Chinook Trivia

What aircraft was a CH-47C that was upgraded to a CH-47D and then selected as one of the three prototype CH-47Fs and where is it today?

67-18541 was upgraded to 83-24121 which became an EMD F Model 03-08003 which was subsequently inducted into the "real" F Model program. The airframe found its way to Hampshire, England where it has been repainted in Royal Air Force livery and sits outside the main gate at RAF Odiham which is home to the RAF Chinooks. The photos show the transition from the Army to the RAF.

Chinook Trivia

Which of the athletic shoe companies proudly displays their stripes on a Chinook?

One of the lesser known vendors supporting the Chinook program appears to be Addidas – or so it would seem by these photos of the ski-equipped MH-47G 05-03761. Notice the box-like attachment to the refueling boom – that is a replacement radar altimeter because the skis interfered with the standard one.

Aircraft Database – Attachment A

This data base (Appendix A) is one layout of a larger H-47 database and provides the basic information about every Chinook ever built for the US Army from the first prototype to the F models still in production. The following fields are included:
Build – sometimes referred to as the "construction number" or "manufacturer's serial number", this is a sequential number assigned to each aircraft. It is generally but not always the sequence in which the aircraft are built. Build numbers are normally assigned by the manufacturer.

Serial Number – Often called a "tail number" and is an identification number normally painted on the tail of the aircraft (or in the case of the Chinook, the aft pylon). Serial numbers for US military aircraft are assigned with the first two digits indicating the fiscal year of the contract for the aircraft production. Military serial numbers are unique – no other aircraft of any service will have the same tail number.

Combat Service – An indication of which theater (if any) the aircraft served in a combat support role. In this database, the service ribbons are used as follows:

 Vietnam/Laos/Cambodia
 Operation Desert Shield/Desert Storm
 Operation Iraqi Freedom
 Operation Enduring Freedom (Afghanistan)
Note: Service records for Iraq and Afghanistan were not complete at the time this version of the database was published and not all aircraft that have served in theater have been annotated. Many aircraft served in both Iraq and Afghanistan but only the latest theater is shown

Delivery Date – This is normally the date that the US Army signed the DD Form 250, Material Inspection and Receiving Report which marks the delivery of the aircraft by the manufacturer. In the case of the H-47, the aircraft was often completed and tested for some time before being accepted by the Army. The first CH-47A prototype was completed in June 1961, flew for the first time in September 1961 but was not delivered to the Army until October 1962.

Previous Model – for aircraft being remanufactured or converted from a previous model. Note that for F models, the previous model will indicate CH-47D for remanufactured aircraft and NB-XXX for new build aircraft.

Previous Serial Number – for remanufactured F models, while this serial number refers to a D model whose dynamic components were used to equip the new F model airframe, there is no actual "connection" to that aircraft.

Aircraft Database – Attachment A

Disposition – This is a snapshot of the status of the aircraft as of 01 October 2012.

Loss Date – The date the aircraft was lost, destroyed, captured or attritted.

Induction Date – The date the aircraft was inducted into an upgrade/conversion program

New Serial Number – The tail number assigned to the upgraded/converted aircraft. Note that for the F model, the "new" serial number is for a completely new airframe.

New Model – The model of the upgraded/converted aircraft.

The complete H-47 Database includes a separate page for each aircraft and includes scrollable text regarding that particular tail number and, where possible, a photograph of the specific aircraft. Because of the size of this layout of the database (1,600 pages), we are working on an electronic distribution format. The following page is a sample of the layout. [Text may be truncated in the pdf version of this layout]

Build
B069

Delivery Date
08 Sep 1964

Induction Date

Prev Model

Prev SN

63-07915

CH-47A

Combat Service
Vietnam

Converted To
CH-47D

Induction Date
18 Aug 1992

Serial Number
92-00298

Status
Converted to D Model

Loss Date

Transfer Date

63-07915, Boeing build number B-069, was a CH-47A helicopter. The U.S. Army acceptance date was 8 September 1964. 63-07915 accumulated 2,923.5 aircraft hours. At some point, 63-07915 was in storage at Davis Monthan as XM0029 from Apr 25, 1988 through about June 1992. On 18 August 1992, 63-07915 was inducted into the D model program and converted to 92-00298. Photo: 63-07915 in Vietnam May 1966 hovering over a fire support base.

VHPA RVN INCIDENTS JUN 1966-JAN 1967

DATE	FLT HRS	UIC	UNIT	AREA	POST	COUNTRY
196610	0	546	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196611	31	577	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196612	20	597	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196701	28	625	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196702	35	660	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196703	34	694	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196704	65	759	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196705	40	799	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196706	40	839	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196707	0	839	WAAWA0	COA	228ABAH1CAV	VIETNAM RVN
196708	0	839	W0Y6AA	INTRANSIT	IN TRANSIT	AVCOMCTR
196709	0	839	W0Y6AA	INTRANSIT	IN TRANSIT	AVCOMCTR
196710	0	839	W0Y6AA	INTRANSIT	IN TRANSIT	AVCOMCTR
196711	0	839	W0Y6AA	INTRANSIT	IN TRANSIT	AVCOMCTR
196712	0	839	W0Y6AA	INTRANSIT	IN TRANSIT	AVCOMCTR
196801	13	852	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196802	90	942	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196803	0	942	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196804	66	1008	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196805	45	1053	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196806	55	1108	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196807	42	1150	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196808	70	1220	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196809	19	1239	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196810	57	1296	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS
196811	83	1379	W1DZAA	USA AVN SCHOOL	AV SCH	FORT RUCKER CONARCAS

Note: GOLDBOOK and other data from the Vietnam War is at best, incomplete. Although CH-47 aircraft started arriving in country in September 1965, data entry did not start until October 1966. Also, it was normal to "transfer" an aircraft to various maintenance organizations for major repairs or phase inspection as well as bailment to organizations like Bell Helicopter. In many cases, the data will indicate locations like "Ft Worth" when, in fact, the aircraft was still in country and flying missions, particularly prior to 6610. Combat incident report datesfrequently indicate aircraft activity before the GOLDBOOK entries.

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Appendix A - H-47 Serial Number Database as of 01 November 2012

Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B001	**59-04982**	YCH-47A		10/26/1962			Tested to Destruction	06/01/1971			
B002	**59-04983**	YCH-47A		04/24/1964			Attrited/Cockpit used for simulator for RAF	03/01/1970			
B003	**59-04984**	YCH-47A		01/17/1964			Museum Display - Ft Eustis VA				
B004	**59-04985**	YCH-47A		04/26/1962			Attrited	03/01/1970			
B005	**59-04986**	YCH-47A		01/01/1963			Fuselage on Display - Waverly Hall GA	04/11/1975			
B006	**N/A**	YCH-47A		01/01/1963			Tested to Destruction	04/11/1975			
B007	**60-03448**	CH-47A		02/08/1963			Attrited	05/25/1972			
B008	**60-03449**	CH-47A		02/20/1963			Converted to D Model		11/25/1992	92-00309	CH-47D
B009	**60-03450**	CH-47A		06/29/1962			Accident/Destroyed [US]	03/19/1965			
B010	**60-03451**	CH-47A		12/08/1962			Museum Display - Ft Rucker AL				
B011	**60-03452**	CH-47A		12/14/1962			Attrited	05/25/1972			
B012	**61-02408**	CH-47A		12/19/1962			Museum Display - Ft Campbell KY				
B013	**61-02409**	CH-47A		01/09/1963			Converted to D Model		07/25/1991	91-00261	CH-47D
B014	**61-02410**	CH-47A		02/13/1963			Converted to D Model		09/20/1991	91-00265	CH-47D
B015	**61-02411**	CH-47A		02/14/1963			Accident/Destroyed [US]	01/29/1964			
B016	**61-02412**	CH-47A		02/15/1963			Converted to D Model		08/27/1992	92-00301	CH-47D
B017	**61-02413**	CH-47A		03/28/1963			Converted to D Model		09/01/1992	92-00299	CH-47D
B018	**61-02414**	CH-47A		04/25/1963			Sold to UK				
B019	**61-02415**	CH-47A		04/30/1963			Converted to D Model		09/27/1991	91-00266	CH-47D
B020	**61-02416**	CH-47A		04/29/1963			Converted to D Model		07/18/1991	91-00260	CH-47D
B021	**61-02417**	CH-47A		05/31/1963			Converted to D Model		10/11/1991	91-00267	CH-47D
B022	**61-02418**	CH-47A		05/31/1963			Tested to Destruction at NASA Langley	08/04/1976			
B023	**61-02419**	CH-47A		05/31/1963			Converted to D Model		10/18/1991	91-00268	CH-47D
B024	**61-02420**	CH-47A		06/27/1963			Converted to D Model		09/06/1991	91-00264	CH-47D
B025	**61-02421**	CH-47A		06/29/1963			Converted to D Model		11/01/1991	91-00269	CH-47D
B026	**61-02422**	CH-47A		06/29/1963			Converted to D Model		01/08/1987	87-00074	CH-47D
B027	**61-02423**	CH-47A		06/30/1963			Converted to D Model		11/08/1991	91-00270	CH-47D
B028	**61-02424**	CH-47A		07/30/1963			Converted to D Model		11/20/1986	87-00070	CH-47D
B029	**61-02425**	CH-47A		07/31/1963			Accident/Destroyed [US]	04/15/1969			
B030	**62-02114**	CH-47A		08/23/1963			Converted to D Model		08/29/1991	91-00263	CH-47D
B031	**62-02115**	CH-47A		08/28/1963			Converted to D Model		12/03/1991	92-00280	CH-47D
B032	**62-02116**	CH-47A		08/31/1963			Converted to D Model		01/03/1992	92-00282	CH-47D
B033	**62-02117**	CH-47A		09/25/1963			Converted to D Model		01/26/1987	87-00076	CH-47D
B034	**62-02118**	CH-47A		09/13/1963			Converted to D Model		02/23/1987	87-00080	CH-47D
B035	**62-02119**	CH-47A		09/08/1963			Converted to D Model		11/11/1992	92-00307	CH-47D
B036	**62-02120**	CH-47A		10/28/1963			Accident/Destroyed [US]	07/29/1970			
B037	**62-02121**	CH-47A		10/31/1963			Accident/Destroyed [RVN]	05/09/1966			
B038	**62-02122**	CH-47A		10/31/1963			Accident/Destroyed [US]	10/31/1963			
B039	**62-02123**	CH-47A		11/19/1963			Converted to D Model		09/09/1992	92-00302	CH-47D
B040	**62-02124**	CH-47A		11/27/1963			Converted to D Model		11/18/1992	92-00308	CH-47D
B041	**62-02125**	CH-47A		11/27/1963			Accident/Destroyed [US]	04/29/1964			
B042	**62-02126**	CH-47A		12/27/1963			Accident/Destroyed [US]	03/04/1965			
B043	**62-02127**	CH-47A		12/31/1963			Converted to D Model		05/22/1992	92-00293	CH-47D
B044	**62-02128**	CH-47A		01/04/1964			Converted to D Model		07/07/1992	92-00296	CH-47D
B045	**62-02129**	CH-47A		01/22/1964			Converted to D Model		09/24/1987	87-00108	CH-47D
B046	**62-02130**	CH-47A		01/28/1964			Converted to D Model		02/14/1992	92-00286	CH-47D
B047	**62-02131**	CH-47A		01/29/1964			Converted to D Model		02/28/1992	92-00287	CH-47D
B048	**62-02132**	CH-47A		02/14/1964			Converted to D Model		03/23/1987	87-00084	CH-47D
B049	**62-02133**	CH-47A		02/14/1964			Converted to D Model		04/06/1987	87-00086	CH-47D
B050	**62-02134**	CH-47A		02/27/1964			Accident/Destroyed [US]	07/10/1965			
B051	**62-02135**	CH-47A		03/13/1964			Converted to D Model		04/30/1984	84-24182	CH-47D
B052	**62-02136**	CH-47A		04/22/1964			Converted to D Model		04/20/1987	87-00088	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B053	**62-02137**	CH-47A		04/24/1964			Converted to D Model		05/04/1984	84-24184	CH-47D
B054	**63-07900**	CH-47A		04/23/1964			Converted to D Model		09/25/1992	92-00305	CH-47D
B055	**63-07901**	CH-47A		04/30/1964			Accident/Destroyed [RVN]	12/18/1966			
B056	**63-07902**	CH-47A		04/30/1964			Converted to D Model		05/04/1987	87-00090	CH-47D
B057	**63-07903**	CH-47A		05/18/1964			Converted to D Model		05/18/1987	87-00092	CH-47D
B058	**63-07904**	CH-47A		05/25/1964			Converted to D Model		06/02/1987	87-00094	CH-47D
B059	**63-07905**	CH-47A		05/27/1964			Converted to D Model		03/27/1992	92-00289	CH-47D
B060	**63-07906**	CH-47A		06/22/1964			Converted to D Model		06/16/1987	87-00096	CH-47D
B061	**63-07907**	CH-47A		06/26/1964			Converted to D Model		06/30/1987	87-00098	CH-47D
B062	**63-07908**	CH-47A		06/29/1964			Converted to D Model		04/10/1992	92-00290	CH-47D
B063	**63-07909**	CH-47A		07/24/1964			Converted to D Model		07/15/1987	87-00100	CH-47D
B064	**63-07910**	CH-47A		07/29/1964			Accident/Destroyed [RVN]	11/18/1966			
B065	**63-07911**	CH-47A		07/29/1964			Converted to D Model		07/29/1987	87-00102	CH-47D
B066	**63-07912**	CH-47A		08/25/1964			Converted to D Model		06/22/1992	92-00295	CH-47D
B067	**63-07913**	CH-47A		08/29/1964			Accident/Destroyed [RVN]	01/29/1966			
B068	**63-07914**	CH-47A		08/31/1964			Converted to D Model		08/26/1987	87-00104	CH-47D
B069	**63-07915**	CH-47A		09/08/1964			Converted to D Model		08/18/1992	92-00298	CH-47D
B070	**63-07916**	CH-47A		09/28/1964			Converted to D Model		05/08/1992	92-00292	CH-47D
B071	**63-07917**	CH-47A		10/01/1964			Converted to D Model		09/10/1987	87-00106	CH-47D
B072	**63-07918**	CH-47A		10/14/1964			Converted to D Model		05/07/1984	84-24186	CH-47D
B073	**63-07919**	CH-47A		10/29/1964			Converted to D Model		03/09/1987	87-00082	CH-47D
B074	**63-07920**	CH-47A		10/29/1964			Converted to D Model		10/22/1987	87-00112	CH-47D
B075	**63-07921**	CH-47A		11/16/1964			Converted to D Model		11/19/1987	87-00116	CH-47D
B076	**63-07922**	CH-47A		02/23/1965			Converted to D Model		04/11/1983	83-24107	CH-47D
B077	**63-07923**	CH-47A		11/27/1964			Converted to D Model		01/05/1983	83-24111	CH-47D
B078	**64-13106**	CH-47A		12/22/1964			Destroyed by Enemy Action [RVN]	02/26/1969			
B079	**64-13107**	CH-47A		12/28/1964			Destroyed by Enemy Action [RVN]	09/21/1967			
B080	**64-13108**	CH-47A		12/23/1964			Converted to D Model		09/27/1983	83-24125	CH-47D
B081	**64-13109**	CH-47A		12/29/1964			Destroyed by Enemy Action [RVN]	04/23/1968			
B082	**64-13110**	CH-47A		01/14/1965			Accident/Destroyed [RVN]	11/15/1965			
B083	**64-13111**	CH-47A		01/22/1965			Converted to MH-47D		04/12/1983	83-24110	MH-47D
B084	**64-13112**	CH-47A		01/27/1965			Converted to D Model		05/16/1983	83-24114	CH-47D
B085	**64-13113**	CH-47A		01/27/1965			Converted to D Model		01/31/1984	84-24156	CH-47D
B086	**64-13114**	CH-47A		02/05/1965			Destroyed by Enemy Action [RVN]	03/24/1966			
B087	**64-13115**	CH-47A		02/16/1965			Converted to D Model		01/07/1983	83-24104	CH-47D
B088	**64-13116**	CH-47A		02/17/1965			Accident/Destroyed [RVN]	05/31/1971			
B089	**64-13117**	CH-47A		02/18/1965			Converted to D Model		05/31/1984	84-24171	CH-47D
B090	**64-13118**	CH-47A		04/16/1965			Converted to D Model		06/27/1983	83-24117	CH-47D
B091	**64-13119**	CH-47A		03/02/1965			Converted to D Model		08/31/1984	84-24178	CH-47D
B092	**64-13120**	CH-47A		03/12/1965			Converted to D Model		12/08/1983	84-24153	CH-47D
B093	**64-13121**	CH-47A		03/10/1965			Converted to D Model		07/31/1984	84-24174	CH-47D
B094	**64-13122**	CH-47A		03/10/1965			Converted to D Model		09/06/1983	83-24120	CH-47D
B095	**64-13123**	CH-47A		03/24/1965			Converted to D Model		04/30/1984	84-24168	CH-47D
B096	**64-13124**	CH-47A		04/06/1965			Destroyed by Enemy Action [RVN]	04/19/1968			
B097	**64-13125**	CH-47A		04/20/1965			Converted to D Model		01/26/1984	84-24159	CH-47D
B098	**64-13126**	CH-47A		04/21/1965			Converted to D Model		04/05/1984	84-24165	CH-47D
B099	**64-13127**	CH-47A		04/16/1965			Converted to D Model		09/13/1983	83-24123	CH-47D
B100	**64-13128**	CH-47A		05/08/1965			Accident/Destroyed [RVN]	11/03/1969			
B101	**64-13129**	CH-47A		05/10/1965			Converted to D Model		03/31/1984	84-24162	CH-47D
B102	**64-13130**	CH-47A		05/06/1965			Converted to D Model		08/31/1984	84-24180	CH-47D
B103	**64-13131**	CH-47A		05/12/1965			Accident/Destroyed [RVN]	11/12/1966			
B104	**64-13132**	CH-47A		05/21/1965			Converted to D Model		03/13/1981	81-23388	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
B105	**64-13133**	CH-47A		06/03/1965			Converted to D Model		03/13/1981	81-23389	CH-47D	
B106	**64-13134**	CH-47A		06/17/1965			Converted to D Model		03/13/1981	81-23387	CH-47D	
B107	**64-13135**	CH-47A		06/23/1965			Converted to D Model		09/24/1986	86-01676	CH-47D	
B108	**64-13136**	CH-47A		06/25/1965			Sold to Thailand					
B109	**64-13137**	CH-47A		06/28/1965			Converted to MH-47D		04/05/1984	86-01635	MH-47D	
B110	**64-13138**	CH-47A		07/08/1965			Accident/Destroyed [RVN]	05/04/1966				
B111	**64-13139**	CH-47A		07/06/1965			Destroyed by Enemy Action [RVN]	02/07/1968				
B112	**64-13140**	CH-47A		07/16/1965			Converted to D Model		10/21/1983	84-24154	CH-47D	
B113	**64-13141**	CH-47A		07/14/1965			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B114	**64-13142**	CH-47A		07/19/1965			Converted to D Model		06/04/1986	86-01662	CH-47D	
B115	**64-13143**	CH-47A		07/24/1965			Transferred to VNAF - Destroyed by Enemy Action [RVN]	05/02/1972				
B116	**64-13144**	CH-47A		07/24/1965			Converted to D Model		06/21/1982	82-23774	CH-47D	
B117	**64-13145**	ACH-47A		12/20/1965			Accident/Destroyed [RVN]	05/05/1967				
B118	**64-13146**	CH-47A		08/02/1965			Destroyed by Enemy Action [RVN]	02/26/1969				
B119	**64-13147**	CH-47A		08/06/1965			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/25/1975				
B120	**64-13148**	CH-47A		08/16/1965			Sold to Thailand					
B121	**64-13149**	ACH-47A		11/30/1965			"Easy Money" Display Aircraft-Redstone Arsenal					
B122	**64-13150**	CH-47A		08/28/1965			Converted to D Model		03/31/1984	84-24163	CH-47D	
B123	**64-13151**	ACH-47A		12/10/1965			Accident/Destroyed [RVN]	08/05/1966				
B124	**64-13152**	CH-47A		09/08/1965			Destroyed by Enemy Action [RVN]	04/19/1968				
B125	**64-13153**	CH-47A		09/15/1965			Accident/Destroyed [RVN]	06/25/1967				
B126	**64-13154**	ACH-47A		09/01/1965			Destroyed by Enemy Action [RVN]	02/22/1968				
B127	**64-13155**	CH-47A		11/17/1965			Converted to D Model		06/10/1986	86-01663	CH-47D	
B128	**64-13156**	CH-47A		09/29/1965			Accident/Destroyed [RVN]	05/30/1966				
B129	**64-13157**	CH-47A		10/19/1965			Accident/Destroyed [RVN]	05/10/1972				
B130	**64-13158**	CH-47A		10/29/1965			Accident/Destroyed [RVN]	08/18/1967				
B131	**64-13159**	CH-47A		10/09/1965			Converted to D Model		12/20/1985	86-01638	CH-47D	
B132	**64-13160**	CH-47A		10/20/1965			Converted to D Model		04/30/1984	84-24166	CH-47D	
B133	**64-13161**	CH-47A		11/18/1965			Accident/Destroyed [RVN]	08/30/1969				
B134	**64-13162**	CH-47A		11/17/1965			Accident/Destroyed [RVN]	06/27/1966				
B135	**64-13163**	CH-47A		10/29/1965			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B136	**64-13164**	CH-47A		11/09/1965			Converted to D Model		01/22/1986	86-01641	CH-47D	
B137	**64-13165**	CH-47A		11/12/1965			Converted to D Model		12/11/1986	87-00072	CH-47D	
B138	**65-07966**	CH-47A		12/02/1965			Accident/Destroyed [RVN]	06/23/1970				
B139	**65-07967**	CH-47A		11/24/1965			Converted to D Model		07/09/1986	86-01667	CH-47D	
B140	**65-07968**	CH-47A		12/16/1965			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B141	**65-07969**	CH-47A		12/15/1965			Destroyed by Enemy Action [RVN]	10/09/1968				
B142	**65-07970**	CH-47A		12/03/1965			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B143	**65-07971**	CH-47A		12/14/1965			Converted to D Model		07/01/1985	85-24351	CH-47D	
B144	**65-07972**	CH-47A		12/11/1965			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B145	**65-07973**	CH-47A		12/15/1965			Accident/Destroyed [Korea]	03/22/1972				
B146	**65-07974**	CH-47A		12/20/1965			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B147	**65-07975**	CH-47A		12/30/1965			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B148	**65-07976**	CH-47A		01/25/1966			Destroyed by Enemy Action [RVN]	05/07/1967				
B149	**65-07977**	CH-47A		01/07/1966			Converted to D Model		10/30/1985	85-24366	CH-47D	
B150	**65-07978**	CH-47A		01/04/1966			Converted to D Model		10/25/1983	84-24157	CH-47D	
B151	**65-07979**	CH-47A		01/10/1966			Converted to D Model		03/29/1985	85-24338	CH-47D	
B152	**65-07980**	CH-47A		01/26/1966			Converted to D Model		04/30/1986	86-01656	CH-47D	
B153	**65-07981**	CH-47A		01/24/1966			Converted to D Model		12/05/1984	85-24323	CH-47D	
B154	**65-07982**	CH-47A		01/24/1966			Converted to D Model		01/04/1985	85-24326	CH-47D	
B155	**65-07983**	CH-47A		02/01/1966			Converted to D Model		11/28/1984	85-24322	CH-47D	
B156	**65-07984**	CH-47A		02/04/1966			Converted to D Model		01/08/1986	86-01639	CH-47D	

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B157	**65-07985**	CH-47A		02/04/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B158	**65-07986**	CH-47A		02/08/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	12/23/1975			
B159	**65-07987**	CH-47A		02/10/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	02/17/1975			
B160	**65-07988**	CH-47A		02/16/1966			Accident/Destroyed [RVN]	01/18/1970			
B161	**65-07989**	CH-47A		02/15/1966			Destroyed by Enemy Action [RVN]	08/20/1968			
B162	**65-07990**	CH-47A		03/01/1966			Converted to D Model		05/31/1984	84-24169	CH-47D
B163	**65-07991**	CH-47A		02/21/1966			Converted to D Model		10/20/1986	86-01679	CH-47D
B164	**65-07992**	CH-47A		02/24/1966			Converted to BC-347 - Museum Display - Ft Rucker				
B165	**65-07993**	CH-47A		03/01/1966			Converted to D Model		04/14/1986	86-01653	CH-47D
B166	**65-07994**	CH-47A		03/04/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/25/1975			
B167	**65-07995**	CH-47A		03/15/1966			Converted to D Model		05/22/1986	86-01660	CH-47D
B168	**65-07996**	CH-47A		03/14/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B169	**65-07997**	CH-47A		03/15/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B170	**65-07998**	CH-47A		03/22/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B171	**65-07999**	CH-47A		03/23/1966			Destroyed by Enemy Action [RVN]	07/10/1970			
B172	**65-08000**	CH-47A		03/25/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B173	**65-08001**	CH-47A		03/29/1966			Accident/Destroyed [US]	08/20/1979			
B174	**65-08002**	CH-47A		03/29/1966			Converted to D Model		10/23/1985	85-24365	CH-47D
B175	**65-08003**	CH-47A		03/29/1966			Converted to D Model		10/28/1986	86-01680	CH-47D
B176	**65-08004**	CH-47A		03/31/1966			Converted to D Model		02/12/1986	86-01644	CH-47D
B177	**65-08005**	CH-47A		04/06/1966			Converted to D Model		03/24/1982	82-23769	CH-47D
B178	**65-08006**	CH-47A		04/08/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B179	**65-08007**	CH-47A		04/14/1966			Accident/Destroyed [RVN]	02/01/1967			
B180	**65-08008**	CH-47A		04/13/1966			Converted to D Model Prototype			76-08008	YCH-47D
B181	**65-08009**	CH-47A		04/15/1966			Converted to D Model		05/06/1986	86-01657	CH-47D
B182	**65-08010**	CH-47A		04/19/1966			Converted to MH-47D		11/06/1985	85-24367	MH-47D
B183	**65-08011**	CH-47A		04/26/1966			Converted to D Model		11/19/1981	82-23764	CH-47D
B184	**65-08012**	CH-47A		04/27/1966			Converted to D Model		11/05/1986	86-01681	CH-47D
B185	**65-08013**	CH-47A		05/02/1966			Converted to D Model		03/12/1986	86-01648	CH-47D
B186	**65-08014**	CH-47A		05/12/1966			Converted to D Model		03/08/1985	85-24335	CH-47D
B187	**65-08015**	CH-47A		05/10/1966			Converted to D Model		04/02/1986	86-01651	CH-47D
B188	**65-08016**	CH-47A		05/10/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B189	**65-08017**	CH-47A		05/16/1966			Converted to D Model		02/22/1985	85-24333	CH-47D
B190	**65-08018**	CH-47A		05/18/1966			Converted to D Model		07/16/1985	85-24353	CH-47D
B191	**65-08019**	CH-47A		05/23/1966			Converted to D Model		04/05/1985	85-24339	CH-47D
B192	**65-08020**	CH-47A		05/18/1966			Converted to D Model		02/19/1986	86-01645	CH-47D
B193	**65-08021**	CH-47A		05/24/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/25/1975			
B194	**65-08022**	CH-47A		05/31/1966			Accident/Destroyed [RVN]	10/15/1970			
B195	**65-08023**	CH-47A		05/27/1966			Converted to D Model		12/06/1985	86-01636	CH-47D
B196	**65-08024**	CH-47A		06/09/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B197	**65-08025**	CH-47A		06/01/1966			Trans to VNAF-Captured by NVA-On Display Khe Sahn Battle Field	04/30/1975			
B198	**66-00066**	CH-47A		06/08/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	10/27/1972			
B199	**66-00067**	CH-47A		06/09/1966			Accident/Destroyed [RVN]	05/28/1968			
B200	**66-00068**	CH-47A		06/20/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B201	**66-00069**	CH-47A		06/15/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B202	**66-00070**	CH-47A		06/16/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B203	**66-00071**	CH-47A		06/21/1966			Destroyed by Enemy Action [RVN]	03/05/1967			
B204	**66-00072**	CH-47A		06/21/1966			Accident/Destroyed [RVN]	01/15/1967			
B205	**66-00073**	CH-47A		06/30/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B206	**66-00074**	CH-47A		06/29/1966			Converted to D Model		03/05/1986	86-01647	CH-47D
B207	**66-00075**	CH-47A		07/07/1966			Converted to D Model		07/15/1986	86-01668	CH-47D
B208	**66-00076**	CH-47A		07/05/1966			Accident/Destroyed [RVN]	05/30/1970			

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
B209	**66-00077**	CH-47A		07/11/1966			Converted to D Model		04/19/1985	85-24341	CH-47D	
B210	**66-00078**	CH-47A		07/13/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/25/1975				
B211	**66-00079**	CH-47A		07/20/1966			Transferred to VNAF - Accident/Destroyed [RVN]	11/10/1970				
B212	**66-00080**	CH-47A		07/20/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B213	**66-00081**	CH-47A		07/20/1966			Transferred to VNAF - Accident/Destroyed [RVN]	04/30/1975				
B214	**66-00082**	CH-47A		07/22/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	11/09/1973				
B215	**66-00083**	CH-47A		07/25/1966			Accident/Destroyed [RVN]	11/01/1967				
B216	**66-00084**	CH-47A		08/01/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	12/26/1973				
B217	**66-00085**	CH-47A		08/04/1966			Transferred to VNAF - Accident/Destroyed [RVN]	11/03/1972				
B218	**66-00086**	CH-47A		08/04/1966			Trans to VNAF-Captured by NVA-On Display HoChiMinh City	04/30/1975				
B219	**66-00087**	CH-47A		08/08/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B220	**66-00088**	CH-47A		08/08/1966			Destroyed by Enemy Action [RVN]	05/13/1967				
B221	**66-00089**	CH-47A		08/11/1966			Converted to D Model		06/03/1985	85-24347	CH-47D	
B222	**66-00090**	CH-47A		08/16/1966			Converted to D Model		05/17/1985	85-24345	CH-47D	
B223	**66-00091**	CH-47A		08/15/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	06/03/1973				
B224	**66-00092**	CH-47A		08/20/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B225	**66-00093**	CH-47A		08/18/1966			Converted to D Model		08/27/1985	85-24357	CH-47D	
B226	**66-00094**	CH-47A		08/23/1966			Trans to VNAF-Captured by NVA-On Display China Aviation	03/23/1975				
B227	**66-00095**	CH-47A		08/24/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B228	**66-00096**	CH-47A		08/25/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B229	**66-00097**	CH-47A		08/31/1966			Converted to D Model		11/13/1986	87-00069	CH-47D	
B230	**66-00098**	CH-47A		09/02/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B231	**66-00099**	CH-47A		09/02/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	04/26/1972				
B232	**66-00100**	CH-47A		09/08/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B233	**66-00101**	CH-47A		09/09/1966			Converted to D Model		06/10/1985	85-24348	CH-47D	
B234	**66-00102**	CH-47A		09/12/1966			Converted to D Model		05/16/1986	86-01659	CH-47D	
B235	**66-00103**	CH-47A		09/15/1966			Converted to D Model		03/26/1986	86-01650	CH-47D	
B236	**66-00104**	CH-47A		09/23/1966			Converted to D Model		09/08/1986	86-01674	CH-47D	
B237	**66-00105**	CH-47A		09/25/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	01/19/1975				
B238	**66-00106**	CH-47A		09/25/1966			Converted to D Model		02/16/1982	82-23768	CH-47D	
B239	**66-00107**	CH-47A		09/30/1966			Converted to D Model		05/10/1985	85-24344	CH-47D	
B240	**66-00108**	CH-47A		09/30/1966			Converted to D Model		03/30/1982	82-23770	CH-47D	
B241	**66-00109**	CH-47A		09/19/1966			Accident/Destroyed [RVN]	12/10/1969				
B242	**66-00110**	CH-47A		09/24/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	04/12/1972				
B243	**66-00111**	CH-47A		09/30/1966			Accident/Destroyed [RVN]	05/25/1971				
B244	**66-00112**	CH-47A		10/05/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	05/29/1971				
B245	**66-00113**	CH-47A		10/11/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B246	**66-00114**	CH-47A		10/11/1966			Converted to D Model		06/20/1986	86-01665	CH-47D	
B247	**66-00115**	CH-47A		10/12/1966			Converted to D Model		01/16/1983	82-23776	CH-47D	
B248	**66-00116**	CH-47A		10/12/1966			Converted to D Model		04/28/1982	82-23772	CH-47D	
B249	**66-00117**	CH-47A		10/18/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975				
B250	**66-00118**	CH-47A		10/17/1966			Accident/Destroyed [US]	11/22/1974				
B251	**66-00119**	CH-47A		10/20/1966			Converted to D Model		01/05/1982	82-23765	CH-47D	
B252	**66-00120**	CH-47A		10/21/1966			Destroyed by Enemy Action [RVN]	10/22/1968				
B253	**66-00121**	CH-47A		10/22/1966			Accident/Destroyed [Germany]	02/17/1971				
B254	**66-00122**	CH-47A		10/24/1966			Converted to D Model		09/29/1981	82-23762	CH-47D	
B255	**66-00123**	CH-47A		10/22/1966			Converted to D Model		02/15/1985	85-24332	CH-47D	
B256	**66-00124**	CH-47A		10/26/1966			Converted to D Model		03/15/1985	85-24336	CH-47D	
B257	**66-00125**	CH-47A		10/25/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				
B258	**66-19000**	CH-47A		10/28/1966			Converted to D Model		08/20/1985	85-24356	CH-47D	
B259	**66-19001**	CH-47A		10/31/1966			Accident/Destroyed [RVN]	07/16/1969				
B260	**66-19002**	CH-47A		11/04/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975				

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B261	**66-19003**	CH-47A		11/04/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B262	**66-19004**	CH-47A		11/07/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B263	**66-19005**	CH-47A		11/10/1966			Accident/Destroyed [US]	07/18/1968			
B264	**66-19006**	CH-47A		11/09/1966			Accident/Destroyed [RVN]	12/26/1967			
B265	**66-19007**	CH-47A		11/10/1966			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B266	**66-19008**	CH-47A		11/10/1966			Converted to D Model		07/31/1984	84-24176	CH-47D
B267	**66-19009**	CH-47A		11/14/1966			Converted to D Model		07/23/1985	85-24354	CH-47D
B268	**66-19010**	CH-47A		11/15/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	12/12/1974			
B269	**66-19011**	CH-47A		11/16/1966			Accident/Destroyed [RVN]	07/23/1968			
B270	**66-19012**	CH-47A		11/17/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B271	**66-19013**	CH-47A		11/16/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B272	**66-19014**	CH-47A		11/19/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B273	**66-19015**	CH-47A		11/18/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B274	**66-19016**	CH-47A		11/28/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B275	**66-19017**	CH-47A		12/02/1966			Converted to D Model		09/30/1980	81-23383	CH-47D
B276	**66-19018**	CH-47A		11/29/1966			Converted to MH-47D		09/18/1985	85-24360	MH-47D
B277	**66-19019**	CH-47A		11/30/1966			Accident/Destroyed [RVN]	11/21/1968			
B278	**66-19020**	CH-47A		12/02/1966			Converted to D Model		01/31/1984	84-24160	CH-47D
B279	**66-19021**	CH-47A		12/10/1966			Converted to D Model		12/12/1984	85-24324	CH-47D
B280	**66-19022**	CH-47A		12/05/1966			Destroyed by Enemy Action [RVN]	02/26/1969			
B281	**66-19023**	CH-47A		12/12/1966			Accident/Destroyed [Germany]	08/18/1971			
B282	**66-19024**	CH-47A		12/09/1966			Converted to D Model		10/02/1985	85-24362	CH-47D
B283	**66-19025**	CH-47A		12/12/1966			Converted to D Model		09/05/1980	81-23381	CH-47D
B284	**66-19026**	CH-47A		12/19/1966			Converted to D Model		01/11/1985	85-24327	CH-47D
B285	**66-19027**	CH-47A		12/15/1966			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975			
B286	**66-19028**	CH-47A		12/16/1966			Converted to D Model		04/18/1986	86-01654	CH-47D
B287	**66-19029**	CH-47A		12/16/1966			Accident/Destroyed [RVN]	05/06/1969			
B288	**66-19030**	CH-47A		12/19/1966			Converted to D Model		10/02/1986	86-01677	CH-47D
B289	**66-19031**	CH-47A		12/22/1966			Converted to D Model		06/24/1982	82-23775	CH-47D
B290	**66-19032**	CH-47A		12/28/1966			Destroyed by Enemy Action [RVN]	01/03/1968			
B291	**66-19033**	CH-47A		01/09/1967			Transferred to VNAF - Accident/Destroyed [RVN]	02/14/1974			
B292	**66-19034**	CH-47A		01/06/1967			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B293	**66-19035**	CH-47A		01/06/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/25/1975			
B294	**66-19036**	CH-47A		01/05/1967			Converted to D Model		01/25/1985	85-24329	CH-47D
B295	**66-19037**	CH-47A		01/10/1967			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B296	**66-19038**	CH-47A		01/12/1967			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B297	**66-19039**	CH-47A		01/18/1967			Accident/Destroyed [RVN]	10/30/1968			
B298	**66-19040**	CH-47A		01/17/1967			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B299	**66-19041**	CH-47A		01/17/1967			Accident/Destroyed [RVN]	10/03/1968			
B300	**66-19042**	CH-47A		01/20/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975			
B301	**66-19043**	CH-47A		01/20/1967			Converted to D Model		02/24/1982	82-23767	CH-47D
B302	**66-19044**	CH-47A		01/23/1967			Converted to D Model		11/13/1985	85-24368	CH-47D
B303	**66-19045**	CH-47A		01/24/1967			Accident/Destroyed [RVN]	10/31/1969			
B304	**66-19046**	CH-47A		01/31/1967			Destroyed by Enemy Action [RVN]	11/16/1967			
B305	**66-19047**	CH-47A		01/31/1967			Destroyed by Enemy Action [RVN]	11/04/1968			
B306	**66-19048**	CH-47A		01/26/1967			Converted to D Model		01/29/1986	86-01642	CH-47D
B307	**66-19049**	CH-47A		02/01/1967			Converted to MH-47D		09/22/1981	82-23763	MH-47D
B308	**66-19050**	CH-47A		02/02/1967			Destroyed by Enemy Action [RVN]	04/01/1967			
B309	**66-19051**	CH-47A		02/08/1967			Converted to D Model		02/01/1985	85-24330	CH-47D
B310	**66-19052**	CH-47A		02/08/1967			Converted to D Model		09/05/1980	81-23382	CH-47D
B311	**66-19053**	CH-47A		02/14/1967			Accident/Destroyed [RVN]	10/20/1968			
B312	**66-19054**	CH-47A		02/08/1967			Converted to D Model		11/20/1985	85-24369	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B313	**66-19055**	CH-47A		02/22/1967			Converted to D Model		06/30/1984	84-24172	CH-47D
B314	**66-19056**	CH-47A		02/15/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	12/05/1974			
B315	**66-19057**	CH-47A		02/15/1967			Converted to D Model		11/20/1980	81-23384	CH-47D
B316	**66-19058**	CH-47A		02/21/1967			Converted to D Model		01/27/1982	82-23766	CH-47D
B317	**66-19059**	CH-47A		02/22/1967			Destroyed by Enemy Action [RVN]	06/24/1970			
B318	**66-19060**	CH-47A		02/21/1967			Converted to D Model		06/24/1985	85-24350	CH-47D
B319	**66-19061**	CH-47A		02/28/1967			Destroyed by Enemy Action [RVN]	01/26/1969			
B320	**66-19062**	CH-47A		02/27/1967			Destroyed by Enemy Action [RVN]	02/07/1968			
B321	**66-19063**	CH-47A		02/28/1967			Destroyed by Enemy Action [RVN]	04/19/1968			
B322	**66-19064**	CH-47A		03/01/1967			Accident/Destroyed [RVN]	09/12/1970			
B323	**66-19065**	CH-47A		03/03/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	06/13/1973			
B324	**66-19066**	CH-47A		03/08/1967			Converted to D Model		09/11/1985	85-24359	CH-47D
B325	**66-19067**	CH-47A		03/10/1967			Accident/Destroyed [RVN]	10/05/1968			
B326	**66-19068**	CH-47A		03/16/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975			
B327	**66-19069**	CH-47A		03/14/1967			Accident/Destroyed [RVN]	04/26/1968			
B328	**66-19070**	CH-47A		03/10/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	04/30/1975			
B329	**66-19071**	CH-47A		03/16/1967			Converted to MH-47D		04/26/1985	85-24342	MH-47D
B330	**66-19072**	CH-47A		03/15/1967			Converted to D Model		03/18/1982	82-23777	CH-47D
B331	**66-19073**	CH-47A		03/22/1967			Converted to D Model		12/09/1980	81-23385	CH-47D
B332	**66-19074**	CH-47A		03/22/1967			Converted to D Model		04/29/1982	82-23771	CH-47D
B333	**66-19075**	CH-47A		03/24/1967			Accident/Destroyed [RVN]	04/04/1971			
B334	**66-19076**	CH-47A		04/03/1967			Accident/Destroyed [RVN]	02/13/1968			
B335	**66-19077**	CH-47A		04/03/1967			Converted to D Model		10/09/1985	85-24363	CH-47D
B336	**66-19078**	CH-47A		03/30/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]	03/23/1975			
B337	**66-19079**	CH-47A		04/03/1967			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B338	**66-19080**	CH-47A		04/03/1967			Destroyed by Enemy Action [RVN]	04/25/1968			
B339	**66-19081**	CH-47A		04/11/1967			Accident/Destroyed [RVN]	09/15/1968			
B340	**66-19082**	CH-47A		04/10/1967			Trans to VNAF-Captured by NVA-On Display Hanoi	04/30/1975			
B341	**66-19083**	CH-47A		04/19/1967			Transferred to VNAF - Accident/Destroyed [RVN]	01/09/1974			
B342	**66-19084**	CH-47A		04/18/1967			Destroyed by Enemy Action [RVN]	11/08/1969			
B343	**66-19085**	CH-47A		04/20/1967			Accident/Destroyed [RVN]	04/10/1971			
B344	**66-19086**	CH-47A		04/18/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]]	03/23/1975			
B345	**66-19087**	CH-47A		04/27/1967			Converted to D Model		07/31/1986	86-01670	CH-47D
B346	**66-19088**	CH-47A		04/21/1967			Converted to D Model		01/25/1981	81-23386	CH-47D
B347	**66-19089**	CH-47A		04/24/1967			Transferred to VNAF - Captured by NVA [RVN]	04/30/1975			
B348	**66-19090**	CH-47A		02/24/1967			Accident/Destroyed [RVN]	02/27/1969			
B349	**66-19091**	CH-47A		05/02/1967			Destroyed by Enemy Action [RVN]	02/24/1969			
B350	**66-19092**	CH-47A		04/28/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]]	04/30/1975			
B351	**66-19093**	CH-47A		04/28/1967			Transferred to VNAF - Accident/Destroyed [RVN]	08/14/1972			
B352	**66-19094**	CH-47A		05/04/1967			Transferred to VNAF - Destroyed by Enemy Action [RVN]]	04/07/1972			
B353	**66-19095**	CH-47A		05/05/1967			Accident/Destroyed [RVN]	02/11/1970			
B354	**66-19096**	CH-47A		05/04/1967			Converted to D Model		08/20/1986	86-01671	CH-47D
B355	**66-19097**	CH-47A		05/12/1967			Converted to D Model		08/28/1986	86-01673	CH-47D
B356	**66-19098**	CH-47B		05/10/1967			Converted to D Model		10/01/1987	87-00109	CH-47D
B357	**66-19099**	CH-47B		05/19/1967			Converted to D Model		04/20/1988	88-00081	CH-47D
B358	**66-19100**	CH-47B		05/19/1967			Converted to D Model		06/16/1988	88-00089	CH-47D
B359	**66-19101**	CH-47B		05/23/1967			Destroyed by Enemy Action [RVN]	04/13/1970			
B360	**66-19102**	CH-47B		05/24/1967			Converted to D Model		01/16/1987	87-00075	CH-47D
B361	**66-19103**	CH-47B		05/30/1967			Sold to UK				
B362	**66-19104**	CH-47B		05/29/1967			Converted to D Model		07/08/1988	88-00092	CH-47D
B363	**66-19105**	CH-47B		05/25/1967			Converted to D Model		01/06/1988	88-00066	CH-47D
B364	**66-19106**	CH-47B		06/06/1967			Accident/Destroyed [RVN]	03/02/1970			

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B365	**66-19107**	CH-47B		06/09/1967			Converted to D Model		09/16/1986	86-01675	CH-47D
B366	**66-19108**	CH-47B		06/13/1967			Converted to D Model		04/13/1988	88-00080	CH-47D
B367	**66-19109**	CH-47B		06/12/1967			Converted to D Model		05/04/1988	88-00083	CH-47D
B368	**66-19110**	CH-47B		06/15/1967			Accident/Destroyed [Columbia]	08/19/1980			
B369	**66-19111**	CH-47B		06/19/1967			Converted to D Model		04/13/1987	87-00087	CH-47D
B370	**66-19112**	CH-47B		06/20/1967			Converted to D Model		08/19/1987	87-00103	CH-47D
B371	**66-19113**	CH-47B		06/20/1967			Accident/Destroyed [RVN]	07/16/1968			
B372	**66-19114**	CH-47B		06/20/1967			Converted to D Model		04/24/1986	86-01655	CH-47D
B373	**66-19115**	CH-47B		06/22/1967			Converted to D Model		02/26/1986	86-01646	CH-47D
B374	**66-19116**	CH-47B		06/23/1967			Converted to D Model		05/18/1988	88-00085	CH-47D
B375	**66-19117**	CH-47B		06/24/1967			Accident/Destroyed [US]	10/04/1984			
B376	**66-19118**	CH-47B		06/27/1967			Destroyed by Enemy Action [RVN]	01/13/1969			
B377	**66-19119**	CH-47B		06/27/1967			Converted to D Model		07/22/1987	87-00101	CH-47D
B378	**66-19120**	CH-47B		06/27/1967			Converted to D Model		02/16/1987	87-00079	CH-47D
B379	**66-19121**	CH-47B		07/06/1967			Converted to D Model		02/05/1986	86-01643	CH-47D
B380	**66-19122**	CH-47B		07/05/1967			Converted to D Model		02/24/1988	88-00073	CH-47D
B381	**66-19123**	CH-47B		07/14/1967			Converted to D Model		06/09/1988	88-00088	CH-47D
B382	**66-19124**	CH-47B		07/07/1967			Converted to D Model		10/15/1987	87-00111	CH-47D
B383	**66-19125**	CH-47B		07/18/1967			Converted to D Model		05/13/1986	86-01658	CH-47D
B384	**66-19126**	CH-47B		07/21/1967			Destroyed by Enemy Action [RVN]	05/08/1968			
B385	**66-19127**	CH-47B		07/18/1967			Converted to D Model		09/02/1987	87-00105	CH-47D
B386	**66-19128**	CH-47B		07/20/1967			Destroyed by Enemy Action [RVN]	01/13/1969			
B387	**66-19129**	CH-47B		07/21/1967			Converted to D Model		02/03/1988	88-00070	CH-47D
B388	**66-19130**	CH-47B		07/22/1967			Converted to D Model		03/09/1988	88-00075	CH-47D
B389	**66-19131**	CH-47B		07/24/1967			Converted to D Model		02/17/1988	88-00072	CH-47D
B390	**66-19132**	CH-47B		07/24/1967			Converted to D Model		02/02/1987	87-00077	CH-47D
B391	**66-19133**	CH-47B		07/26/1967			Converted to D Model		06/16/1986	86-01664	CH-47D
B392	**66-19134**	CH-47B		07/27/1967			Converted to D Model		05/11/1987	87-00091	CH-47D
B393	**66-19135**	CH-47B		07/28/1967			Converted to D Model		05/26/1987	87-00093	CH-47D
B394	**66-19136**	CH-47B		08/07/1967			Converted to D Model		11/30/1987	88-00062	CH-47D
B395	**66-19137**	CH-47B		08/11/1967			Converted to D Model		01/06/1983	83-24102	CH-47D
B396	**66-19138**	CH-47B		08/11/1967			Converted to D Model		11/14/1989	89-00176	CH-47D
B397	**66-19139**	CH-47B		08/10/1967			Accident/Destroyed [US]	07/05/1968			
B398	**66-19140**	CH-47B		08/16/1967			Converted to D Model		05/29/1986	86-01661	CH-47D
B399	**66-19141**	CH-47B		08/17/1967			Converted to D Model		12/07/1987	88-00063	CH-47D
B400	**66-19142**	CH-47B		08/18/1967			Accident/Destroyed [RVN]	06/09/1970			
B401	**66-19143**	CH-47B		08/24/1967			Accident/Destroyed [RVN]	10/26/1971			
B402	**67-18432**	CH-47B		08/23/1967			Converted to D Model		09/17/1987	87-00107	CH-47D
B403	**67-18433**	CH-47B		08/25/1967			Accident/Destroyed [RVN}	12/21/1970			
B404	**67-18434**	CH-47B		09/08/1967			Converted to D Model		06/09/1987	87-00095	CH-47D
B405	**67-18435**	CH-47B		09/06/1967			Destroyed by Enemy Action [RVN]	05/05/1970			
B406	**67-18436**	CH-47B		09/06/1967			Converted to D Model		02/09/1987	87-00078	CH-47D
B407	**67-18437**	CH-47B		09/15/1967			Converted to D Model		06/23/1987	87-00097	CH-47D
B408	**67-18438**	CH-47B		09/14/1967			Converted to D Model		12/13/1985	86-01637	CH-47D
B409	**67-18439**	CH-47B		09/11/1967			Converted to D Model		01/15/1986	86-01640	CH-47D
B410	**67-18440**	CH-47B		09/15/1967			Converted to D Model		04/06/1988	88-00079	CH-47D
B411	**67-18441**	CH-47B		09/21/1967			Converted to D Model		02/10/1988	88-00071	CH-47D
B412	**67-18442**	CH-47B		09/21/1967			Accident/Destroyed [RVN]	03/17/1970			
B413	**67-18443**	CH-47B		09/26/1967			Converted to D Model		10/29/1987	87-00113	CH-47D
B414	**67-18444**	CH-47B		09/27/1967			Converted to D Model		07/25/1986	86-01669	CH-47D
B415	**67-18445**	CH-47B		10/05/1967			Destroyed by Enemy Action [RVN]	08/26/1970			
B416	**67-18446**	CH-47B		10/04/1967			Converted to D Model		12/19/1986	87-00073	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B417	**67-18447**	CH-47B		10/11/1967			Converted to D Model		12/14/1987	88-00064	CH-47D
B418	**67-18448**	CH-47B		10/07/1967			Converted to D Model		07/21/1986	86-01672	CH-47D
B419	**67-18449**	CH-47B		10/16/1967			Destroyed by Enemy Action [RVN]	02/27/1971			
B420	**67-18450**	CH-47B		10/16/1967			Converted to D Model		01/13/1988	88-00067	CH-47D
B421	**67-18451**	CH-47B		10/19/1967			Converted to D Model		04/08/1986	86-01652	CH-47D
B422	**67-18452**	CH-47B		10/23/1967			Converted to D Model		11/05/1987	87-00114	CH-47D
B423	**67-18453**	CH-47B		10/25/1967			Converted to D Model		03/30/1987	87-00085	CH-47D
B424	**67-18454**	CH-47B		10/31/1967			Converted to D Model		04/27/1988	88-00082	CH-47D
B425	**67-18455**	CH-47B		10/13/1967			Accident/Destroyed [RVN]	06/19/1968			
B426	**67-18456**	CH-47B		11/06/1967			Converted to D Model		06/07/1983	83-24115	CH-47D
B427	**67-18457**	CH-47B		11/06/1967			Accident/Destroyed [RVN]	07/01/1968			
B428	**67-18458**	CH-47B		11/08/1967			Destroyed by Enemy Action [RVN]	05/15/1969			
B429	**67-18459**	CH-47B		11/13/1967			Converted to D Model		11/12/1987	87-00115	CH-47D
B430	**67-18460**	CH-47B		11/06/1967			Converted to D Model		04/21/1983	83-24112	CH-47D
B431	**67-18461**	CH-47B		11/16/1967			Accident/Destroyed [RVN]	03/22/1969			
B432	**67-18462**	CH-47B		11/27/1967			Accident/Destroyed [RVN]	06/09/1971			
B433	**67-18463**	CH-47B		11/26/1967			Converted to D Model		10/08/1987	87-00110	CH-47D
B434	**67-18464**	CH-47B		11/29/1967			Converted to D Model		12/10/1982	83-24108	CH-47D
B435	**67-18465**	CH-47B		12/09/1967			Converted to D Model		06/23/1988	88-00090	CH-47D
B436	**67-18466**	CH-47B		12/12/1967			Converted to D Model		03/16/1987	87-00083	CH-47D
B437	**67-18467**	CH-47B		12/14/1967			Converted to D Model		06/30/1988	88-00091	CH-47D
B438	**67-18468**	CH-47B		12/15/1967			Accident/Destroyed [RVN]	02/15/1971			
B439	**67-18469**	CH-47B		12/16/1967			Destroyed by Enemy Action [RVN]	05/12/1968			
B440	**67-18470**	CH-47B		12/16/1967			Destroyed by Enemy Action [RVN]	02/23/1969			
B441	**67-18471**	CH-47B		12/17/1967			Converted to D Model		12/03/1986	87-00071	CH-47D
B442	**67-18472**	CH-47B		12/18/1967			Converted to D Model		03/19/1986	86-01649	CH-47D
B443	**67-18473**	CH-47B		12/19/1967			Converted to D Model		06/02/1988	88-00087	CH-47D
B444	**67-18474**	CH-47B		01/08/1968			Converted to D Model		07/08/1987	87-00099	CH-47D
B445	**67-18475**	CH-47B		01/09/1968			Destroyed by Enemy Action [RVN]	05/12/1968			
B446	**67-18476**	CH-47B		01/09/1968			Converted to D Model		01/27/1988	88-00069	CH-47D
B447	**67-18477**	CH-47B		01/12/1968			Converted to D Model		03/02/1987	87-00081	CH-47D
B448	**67-18478**	CH-47B		01/16/1968			Converted to D Model		03/30/1988	88-00078	CH-47D
B449	**67-18479**	CH-47B		01/17/1968			Converted to D Model Prototype			76-18479	YCH-47D
B450	**67-18480**	CH-47B		01/18/1968			Destroyed by Enemy Action [RVN]	05/04/1970			
B451	**67-18481**	CH-47B		01/22/1968			Destroyed by Enemy Action [RVN]	01/13/1969			
B452	**67-18482**	CH-47B		01/24/1968			Converted to D Model		03/23/1988	88-00077	CH-47D
B453	**67-18483**	CH-47B		01/30/1968			Converted to D Model		12/13/1982	83-24105	CH-47D
B454	**67-18484**	CH-47B		02/09/1968			Converted to D Model		04/27/1987	87-00089	CH-47D
B455	**67-18485**	CH-47B		02/08/1968			Accident/Destroyed [RVN]	05/31/1970			
B456	**67-18486**	CH-47B		02/10/1968			Converted to D Model		01/20/1988	88-00068	CH-47D
B457	**67-18487**	CH-47B		02/12/1968			Accident/Destroyed [US]	02/06/1970			
B458	**67-18488**	CH-47B		02/19/1968			Converted to D Model		05/25/1988	88-00086	CH-47D
B459	**67-18489**	CH-47B		02/20/1968			Converted to D Model		03/02/1988	88-00074	CH-47D
B460	**67-18490**	CH-47B		02/23/1968			Accident/Destroyed [US]	09/27/1977			
B461	**67-18491**	CH-47B		02/26/1968			Converted to D Model		12/21/1987	88-00065	CH-47D
B462	**67-18492**	CH-47B		02/27/1968			Converted to D Model		03/16/1988	88-00076	CH-47D
B463	**67-18493**	CH-47B		02/28/1968			Accident/Destroyed [RVN]	02/06/1971			
B464	**67-18494**	CH-47C		03/30/1968			Converted to D Model		02/19/1991	91-00240	CH-47D
B465	**67-18495**	CH-47C		03/29/1968			Converted to D Model		04/09/1991	91-00247	CH-47D
B466	**67-18496**	CH-47C		03/29/1968			Accident/Destroyed [US]	02/13/1969			
B467	**67-18497**	CH-47C		03/29/1968			Destroyed by Enemy Action [RVN]	05/17/1970			
B468	**67-18498**	CH-47C		03/29/1968			Captured by North Korea	07/14/1977			

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B469	**67-18499**	CH-47C		03/29/1968			Accident/Destroyed [RVN]	07/03/1970			
B470	**67-18500**	CH-47C		03/29/1968			Converted to MH-47D		07/10/1989	89-00160	MH-47D
B471	**67-18501**	CH-47C		03/29/1968			Accident/Destroyed [RVN]	02/10/1969			
B472	**67-18502**	CH-47C		03/29/1968			Destroyed by Enemy Action [Laos]	03/18/1971			
B473	**67-18503**	CH-47C		03/29/1968			Converted to D Model		10/03/1989	89-00170	CH-47D
B474	**67-18504**	CH-47C		04/08/1968			Converted to D Model		05/24/1985	85-24346	CH-47D
B475	**67-18505**	CH-47C		04/09/1968			Converted to D Model		01/05/1989	89-00134	CH-47D
B476	**67-18506**	CH-47C		04/12/1968			Destroyed by Enemy Action [Laos]	02/15/1971			
B477	**67-18507**	CH-47C		04/12/1968			Destroyed by Enemy Action [RVN]	07/23/1970			
B478	**67-18508**	CH-47C		04/17/1968			Destroyed by Enemy Action [RVN]	05/11/1970			
B479	**67-18509**	CH-47C		04/19/1968			Converted to D Model		03/22/1985	85-24337	CH-47D
B480	**67-18510**	CH-47C		04/29/1968			Converted to D Model		02/09/1990	90-00189	CH-47D
B481	**67-18511**	CH-47C		04/22/1968			Accident/Destroyed [Korea]	03/02/1977			
B482	**67-18512**	CH-47C		04/26/1968			Accident/Destroyed [Peru]	06/13/1970			
B483	**67-18513**	CH-47C		04/29/1968			Accident/Destroyed [RVN]	08/02/1969			
B484	**67-18514**	CH-47C		05/03/1968			Destroyed by Enemy Action [RVN]	03/12/1970			
B485	**67-18515**	CH-47C		05/08/1968			Converted to D Model		01/19/1990	90-00186	CH-47D
B486	**67-18516**	CH-47C		05/09/1968			Converted to D Model		03/02/1989	89-00142	CH-47D
B487	**67-18517**	CH-47C		05/15/1968			Converted to D Model		01/26/1989	89-00137	CH-47D
B488	**67-18518**	CH-47C		05/16/1968			Accident/Destroyed [RVN]	03/05/1971			
B489	**67-18519**	CH-47C		05/20/1968			Destroyed by Enemy Action [RVN]	03/31/1972			
B490	**67-18520**	CH-47C		05/17/1968			Converted to D Model		09/12/1989	89-00167	CH-47D
B491	**67-18521**	CH-47C		05/20/1968			Converted to D Model		10/24/1990	90-00222	CH-47D
B492	**67-18522**	CH-47C		05/21/1968			Converted to D Model		06/26/1986	86-01666	CH-47D
B493	**67-18523**	CH-47C		05/23/1968			Accident/Destroyed [RVN]	04/02/1969			
B494	**67-18524**	CH-47C		05/27/1968			Accident/Destroyed [RVN]	01/10/1970			
B495	**67-18525**	CH-47C		05/31/1968			Converted to D Model		01/15/1991	91-00235	CH-47D
B496	**67-18526**	CH-47C		06/04/1968			Converted to D Model		06/30/1989	89-00159	CH-47D
B497	**67-18527**	CH-47C		06/10/1968			Accident/Destroyed [US]	03/20/1983			
B498	**67-18528**	CH-47C		06/07/1968			Converted to D Model		10/24/1989	89-00173	CH-47D
B499	**67-18529**	CH-47C		06/13/1968			Destroyed by Enemy Action [RVN]	02/16/1973			
B500	**67-18530**	CH-47C		06/17/1968			Converted to D Model		05/04/1990	90-00201	CH-47D
B501	**67-18531**	CH-47C		06/18/1968			Converted to D Model		09/30/1982	82-23780	CH-47D
B502	**67-18532**	CH-47C		06/18/1968			Converted to MH-47D		07/17/1989	89-00161	MH-47D
B503	**67-18533**	CH-47C		06/28/1968			Converted to D Model		02/02/1989	89-00138	CH-47D
B504	**67-18534**	CH-47C		07/03/1968			Accident/Destroyed [RVN]	07/27/1969			
B505	**67-18535**	CH-47C		07/01/1968			Accident/Destroyed [RVN]	03/20/1970			
B506	**67-18536**	CH-47C		07/29/1968			Destroyed by Enemy Action [RVN]	04/18/1969			
B507	**67-18537**	CH-47C		07/01/1968			Converted to D Model		08/25/1983	84-24167	CH-47D
B508	**67-18538**	CH-47C		07/25/1968			Converted to D Model Prototype			76-18538	YCH-47D
B509	**67-18539**	CH-47C		07/10/1968			Accident/Destroyed [US]	05/15/1987			
B510	**67-18540**	CH-47C		07/11/1968			Converted to D Model		11/22/1991	91-00271	CH-47D
B511	**67-18541**	CH-47C		07/16/1968			Converted to D Model		08/31/1983	83-24121	CH-47D
B512	**67-18542**	CH-47C		07/16/1968			Tested to Destruction at NASA Langley	02/08/1971			
B513	**67-18543**	CH-47C		07/18/1968			Destroyed by Enemy Action [RVN]	02/23/1969			
B514	**67-18544**	CH-47C		07/17/1968			Accident/Destroyed [RVN]	06/23/1969			
B515	**67-18545**	CH-47C		07/30/1968			Accident/Destroyed [RVN]	04/02/1971			
B516	**67-18546**	CH-47C		08/09/1968			Converted to D Model		09/05/1989	89-00166	CH-47D
B517	**67-18547**	CH-47C		07/28/1968			Converted to D Model		04/16/1991	91-00248	CH-47D
B518	**67-18548**	CH-47C		08/05/1968			Converted to D Model		01/24/1992	92-00284	CH-47D
B519	**67-18549**	CH-47C		08/09/1968			Converted to D Model		08/21/1989	89-00164	CH-47D
B520	**67-18550**	CH-47C		08/15/1968			Converted to D Model		09/30/1984	84-24181	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B521	**67-18551**	CH-47C		08/19/1968			Converted to D Model		10/31/1989	89-00174	CH-47D
B522	**68-15810**	CH-47C		08/28/1968			Destroyed by Enemy Action [RVN]	07/18/1970			
B523	**68-15811**	CH-47C		08/20/1968			Converted to D Model		04/30/1991	91-00250	CH-47D
B524	**68-15812**	CH-47C		08/28/1968			Converted to D Model		02/16/1990	90-00190	CH-47D
B525	**68-15813**	CH-47C		08/30/1968			Converted to D Model		04/21/1983	83-24113	CH-47D
B526	**68-15814**	CH-47C		09/11/1968			Converted to D Model		01/08/1991	91-00234	CH-47D
B527	**68-15815**	CH-47C		09/23/1968			Converted to D Model		07/24/1989	89-00162	CH-47D
B528	**68-15816**	CH-47C		09/24/1968			Converted to D Model		12/21/1989	90-00183	CH-47D
B529	**68-15817**	CH-47C		09/23/1968			Converted to D Model		11/07/1990	90-00224	CH-47D
B530	**68-15818**	CH-47C		09/23/1968			Converted to D Model		07/02/1990	90-00209	CH-47D
B531	**68-15819**	CH-47C		09/23/1968			Converted to D Model		11/21/1989	89-00177	CH-47D
B532	**68-15820**	CH-47C		09/27/1968			Converted to D Model		01/12/1989	89-00135	CH-47D
B533	**68-15821**	CH-47C		09/28/1968			Converted to D Model		10/10/1989	89-00171	CH-47D
B534	**68-15822**	CH-47C		10/04/1968			Converted to D Model		05/25/1989	89-00154	CH-47D
B535	**68-15823**	CH-47C		10/07/1968			Accident/Destroyed [RVN]	08/13/1970			
B536	**68-15824**	CH-47C		10/17/1968			Accident/Destroyed [RVN]	08/22/1969			
B537	**68-15825**	CH-47C		10/18/1968			Converted to D Model		10/17/1989	89-00172	CH-47D
B538	**68-15826**	CH-47C		10/23/1968			Accident/Destroyed [Columbia]	11/20/1987			
B539	**68-15827**	CH-47C		10/22/1968			Converted to D Model		10/17/1988	88-00104	CH-47D
B540	**68-15828**	CH-47C		10/24/1968			Converted to D Model		01/05/1990	90-00184	CH-47D
B541	**68-15829**	CH-47C		10/28/1968			Converted to D Model		03/09/1989	89-00143	CH-47D
B542	**68-15830**	CH-47C		10/29/1968			Converted to D Model		03/23/1984	84-24164	CH-47D
B543	**68-15831**	CH-47C		10/29/1968			Converted to D Model		10/31/1988	88-00106	CH-47D
B544	**68-15832**	CH-47C		11/08/1968			Accident/Destroyed [Panama]	06/15/1987			
B545	**68-15833**	CH-47C		11/08/1968			Converted to D Model		01/22/1991	91-00236	CH-47D
B546	**68-15834**	CH-47C		11/20/1968			Converted to D Model		02/23/1989	89-00141	CH-47D
B547	**68-15835**	CH-47C		11/21/1968			Accident/Destroyed [RVN]	02/15/1971			
B548	**68-15836**	CH-47C		11/25/1968			Converted to D Model		04/06/1989	89-00147	CH-47D
B549	**68-15837**	CH-47C		11/22/1968			Accident/Destroyed [RVN]	05/13/1970			
B550	**68-15838**	CH-47C		11/27/1968			Converted to E Model		05/11/1988	88-00267	YMH-47E
B551	**68-15839**	CH-47C		01/13/1969			Converted to D Model		06/17/1985	85-24349	CH-47D
B552	**68-15840**	CH-47C		12/16/1968			Converted to D Model		06/30/1984	84-24173	CH-47D
B553	**68-15841**	CH-47C		12/26/1968			Accident/Destroyed [RVN]	09/03/1969			
B554	**68-15842**	CH-47C		01/17/1969			Converted to D Model		09/05/1990	90-00215	CH-47D
B555	**68-15843**	CH-47C		01/27/1969			Converted to D Model		07/09/1985	85-24352	CH-47D
B556	**68-15844**	CH-47C		11/20/1968			Converted to D Model		05/07/1991	91-00251	CH-47D
B557	**68-15845**	CH-47C		11/26/1968			Accident/Destroyed [US]	07/11/1983			
B558	**68-15846**	CH-47C		11/25/1968			Converted to D Model		09/26/1988	88-00101	CH-47D
B559	**68-15847**	CH-47C		12/05/1968			Converted to D Model		07/29/1980	88-00095	CH-47D
B560	**68-15848**	CH-47C		12/10/1968			Converted to D Model		11/07/1989	89-00175	CH-47D
B561	**68-15849**	CH-47C		12/16/1968			Converted to D Model		02/09/1989	89-00139	CH-47D
B562	**68-15850**	CH-47C		12/13/1968			Converted to D Model		05/03/1985	85-24343	CH-47D
B563	**68-15851**	CH-47C		12/16/1968			Converted to D Model		07/22/1988	88-00094	CH-47D
B564	**68-15852**	CH-47C		12/18/1968			Converted to D Model		06/16/1989	89-00157	CH-47D
B565	**68-15853**	CH-47C		12/20/1968			Converted to D Model		07/10/1990	90-00210	CH-47D
B566	**68-15854**	CH-47C		12/26/1968			Destroyed by Enemy Action [RVN]	05/24/1972			
B567	**68-15855**	CH-47C		01/13/1969			Converted to D Model		10/10/1986	86-01678	CH-47D
B568	**68-15856**	CH-47C		01/15/1969			Converted to D Model		07/24/1990	90-00212	CH-47D
B569	**68-15857**	CH-47C		01/27/1969			Converted to D Model		10/03/1990	90-00219	CH-47D
B570	**68-15858**	CH-47C		04/30/1969			Converted to D Model		10/10/1990	90-00220	CH-47D
B571	**68-15859**	CH-47C		04/28/1969			Converted to D Model		03/09/1990	90-00193	CH-47D
B572	**68-15860**	CH-47C		04/23/1969			Converted to D Model		06/09/1989	89-00156	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B573	**68-15861**	CH-47C		04/28/1969			Converted to D Model		07/30/1985	85-24355	CH-47D
B574	**68-15862**	CH-47C		04/30/1969			Converted to D Model		05/18/1989	89-00153	CH-47D
B575	**68-15863**	CH-47C		04/30/1969			Converted to D Model		04/13/1989	89-00148	CH-47D
B576	**68-15864**	CH-47C		04/30/1969			Converted to D Model		03/23/1990	90-00195	CH-47D
B577	**68-15865**	CH-47C		04/30/1969			Converted to D Model		09/12/1988	88-00099	CH-47D
B578	**68-15866**	CH-47C		05/07/1969			Accident/Destroyed [RVN]	11/28/1971			
B579	**68-15867**	CH-47C		05/13/1969			Converted to D Model		09/19/1988	88-00100	CH-47D
B580	**68-15868**	CH-47C		05/14/1969			Converted to D Model		07/15/1988	88-00093	CH-47D
B581	**68-15869**	CH-47C		05/15/1969			Accident/Destroyed [RVN]	01/30/1971			
B582	**68-15990**	CH-47C		05/15/1969			Converted to D Model		02/16/1989	89-00140	CH-47D
B583	**68-15991**	CH-47C		05/19/1969			Converted to D Model		01/20/1984	84-24152	CH-47D
B584	**68-15992**	CH-47C		05/19/1969			Converted to D Model		08/28/1990	90-00214	CH-47D
B585	**68-15993**	CH-47C		05/21/1969			Accident/Destroyed [Germany]	02/25/1980			
B586	**68-15994**	CH-47C		05/26/1969			Accident/Destroyed [RVN]	08/31/1970			
B587	**68-15995**	CH-47C		05/26/1969			Converted to D Model		10/24/1988	88-00105	CH-47D
B588	**68-15996**	CH-47C		06/02/1969			Converted to D Model		05/18/1983	83-24116	CH-47D
B589	**68-15997**	CH-47C		06/12/1969			Converted to D Model		10/03/1988	88-00102	CH-47D
B590	**68-15998**	CH-47C		06/11/1969			Converted to D Model		09/19/1990	90-00217	CH-47D
B591	**68-15999**	CH-47C		06/10/1969			Destroyed by Enemy Action [RVN]	05/19/1972			
B592	**68-16000**	CH-47C		07/02/1969			Destroyed by Enemy Action [Cambodia]	12/10/1971			
B593	**68-16001**	CH-47C		06/30/1969			Converted to D Model		09/19/1983	83-24122	CH-47D
B594	**68-16002**	CH-47C		07/18/1969			Converted to D Model		06/17/1982	82-23773	CH-47D
B595	**68-16003**	CH-47C		08/25/1969			Converted to E Model		07/31/1990	90-00414	MH-47E
B596	**68-16004**	CH-47C		09/05/1969			Converted to D Model		05/18/1990	90-00203	CH-47D
B597	**68-16005**	CH-47C		08/29/1969			Converted to E Model		10/04/1991	91-00499	MH-47E
B598	**68-16006**	CH-47C		09/02/1969			Converted to D Model		10/10/1988	88-00103	CH-47D
B599	**68-16007**	CH-47C		09/16/1969			Converted to D Model		10/17/1990	90-00221	CH-47D
B600	**68-16008**	CH-47C		09/11/1969			Converted to D Model		03/16/1989	89-00144	CH-47D
B601	**68-16009**	CH-47C		09/23/1969			Converted to D Model		07/27/1982	82-23779	CH-47D
B602	**68-16010**	CH-47C		09/29/1969			Converted to D Model		02/08/1985	85-24331	CH-47D
B603	**68-16011**	CH-47C		07/01/1969			Converted to D Model		06/02/1989	89-00155	CH-47D
B604	**68-16012**	CH-47C		07/10/1969			Converted to D Model		09/26/1989	89-00169	CH-47D
B605	**68-16013**	CH-47C		07/16/1969			Converted to D Model		10/16/1985	85-24364	CH-47D
B606	**68-16014**	CH-47C		07/18/1969			Converted to D Model		08/22/1983	83-24119	CH-47D
B607	**68-16015**	CH-47C		08/27/1969			Converted to D Model		09/12/1990	90-00216	CH-47D
B608	**68-16016**	CH-47C		08/29/1969			Converted to D Model		08/19/1988	88-00096	CH-47D
B609	**68-16017**	CH-47C		12/15/1969			Converted to D Model		11/30/1988	89-00130	CH-47D
B610	**68-16018**	CH-47C		09/09/1969			Converted to D Model		04/23/1991	91-00249	CH-47D
B611	**68-16019**	CH-47C		09/11/1969			Converted to D Model		12/21/1990	91-00233	CH-47D
B612	**68-16020**	CH-47C		10/10/1969			Converted to D Model		09/30/1984	84-24187	CH-47D
B613	**68-16021**	CH-47C		10/15/1969			Converted to MH-47D		09/25/1985	85-24361	MH-47D
B614	**68-16022**	CH-47C		10/30/1969			Accident/Destroyed [Cambodia]	06/25/1970			
B615	**69-17100**	CH-47C		11/03/1969			Accident/Destroyed [RVN]	09/16/1970			
B616	**69-17101**	CH-47C		12/09/1969			Converted to D Model		06/12/1991	91-00256	CH-47D
B617	**69-17102**	CH-47C		11/07/1969			Converted to D Model		01/10/1983	83-24106	CH-47D
B618	**69-17103**	CH-47C		01/14/1970			Converted to D Model		07/03/1991	91-00259	CH-47D
B619	**69-17104**	CH-47C		01/31/1970			Converted to D Model		07/28/1982	82-23778	CH-47D
B620	**69-17105**	CH-47C		02/17/1970			Accident/Destroyed [US]	07/12/1979			
B621	**69-17106**	CH-47C		02/25/1970			Converted to MH-47D		12/07/1988	89-00131	MH-47D
B622	**69-17107**	CH-47C		03/26/1970			Converted to D Model		03/30/1990	90-00196	CH-47D
B623	**69-17108**	CH-47C		03/25/1970			Accident/Destroyed [US]	08/05/1976			
B624	**69-17109**	CH-47C		04/27/1970			Converted to D Model		08/25/1983	83-24124	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
B625	**69-17110**	CH-47C		04/30/1970			Converted to D Model		04/02/1991	91-00246	CH-47D
B626	**69-17111**	CH-47C		05/28/1970			Converted to D Model		01/18/1985	85-24328	CH-47D
B627	**69-17112**	CH-47C		05/28/1970			Converted to D Model		03/01/1985	85-24334	CH-47D
B628	**69-17113**	CH-47C		06/15/1970			Converted to D Model		07/31/1984	84-24175	CH-47D
B629	**69-17114**	CH-47C		06/30/1970			Converted to D Model		11/14/1988	88-00108	CH-47D
B630	**69-17115**	CH-47C		07/28/1970			Converted to D Model		10/31/1990	90-00223	CH-47D
B631	**69-17116**	CH-47C		07/31/1970			Converted to D Model		09/02/1988	88-00098	CH-47D
B632	**69-17117**	CH-47C		08/20/1970			Converted to D Model		04/06/1990	90-00197	CH-47D
B633	**69-17118**	CH-47C		08/24/1970			Converted to E Model		06/15/1992	92-00471	MH-47E
B634	**69-17119**	CH-47C		09/28/1970			Destroyed by Enemy Action [RVN]	10/31/1972			
B635	**69-17120**	CH-47C		09/28/1970			Accident/Destroyed [RVN]	07/21/1971			
B636	**69-17121**	CH-47C		10/28/1970			Converted to D Model		04/12/1985	85-24340	CH-47D
B637	**69-17122**	CH-47C		10/28/1970			Converted to D Model		06/25/1990	90-00208	CH-47D
B638	**69-17123**	CH-47C		11/21/1970			Converted to D Model		11/21/1988	88-00109	CH-47D
B639	**69-17124**	CH-47C		11/25/1970			Accident/Destroyed [Germany]	07/15/1977			
B640	**69-17125**	CH-47C		12/28/1970			Converted to D Model		06/04/1990	90-00205	CH-47D
B641	**69-17126**	CH-47C		12/28/1970			Converted to D Model		12/09/1982	83-24103	CH-47D
B642	**70-15000**	CH-47C		01/28/1971			Converted to D Model		06/18/1990	90-00207	CH-47D
B643	**70-15001**	CH-47C		01/28/1971			Converted to D Model		05/31/1984	84-24170	CH-47D
B644	**70-15002**	CH-47C		01/31/1971			Converted to D Model		04/20/1989	89-00149	CH-47D
B645	**70-15003**	CH-47C		02/19/1971			Converted to D Model		08/01/1991	91-00262	CH-47D
B646	**70-15004**	CH-47C		02/26/1971			Converted to D Model		09/26/1990	90-00218	CH-47D
B647	**70-15005**	CH-47C		02/26/1971			Converted to D Model		04/27/1989	89-00150	CH-47D
B648	**70-15006**	CH-47C		03/17/1971			Converted to D Model		08/31/1984	84-24179	CH-47D
B649	**70-15007**	CH-47C		03/23/1971			Converted to E Model		12/10/1991	92-00400	MH-47E
B650	**70-15008**	CH-47C		03/26/1971			Converted to D Model		12/14/1988	89-00132	CH-47D
B651	**70-15009**	CH-47C		04/12/1971			Converted to D Model		01/12/1990	90-00185	CH-47D
B652	**70-15010**	CH-47C		04/15/1971			Converted to MH-47D		05/11/1983	83-24118	MH-47D
B653	**70-15011**	CH-47C		04/23/1971			Converted to D Model		09/04/1985	85-24358	CH-47D
B654	**70-15012**	CH-47C		05/10/1971			Converted to D Model		03/23/1989	89-00145	CH-47D
B655	**70-15013**	CH-47C		05/14/1971			Converted to D Model		09/30/1984	84-24185	CH-47D
B656	**70-15014**	CH-47C		05/25/1971			Converted to D Model		02/17/1984	84-24158	CH-47D
B657	**70-15015**	CH-47C		06/07/1971			Converted to E Model		07/28/1992	92-00474	MH-47E
B658	**70-15016**	CH-47C		06/17/1971			Converted to D Model		03/31/1984	84-24161	CH-47D
B659	**70-15017**	CH-47C		06/21/1971			Converted to D Model		02/16/1984	84-24155	CH-47D
B660	**70-15018**	CH-47C		07/15/1971			Converted to D Model		01/26/1990	90-00187	CH-47D
B661	**70-15019**	CH-47C		07/14/1971			Converted to D Model		09/30/1984	84-24183	CH-47D
B662	**70-15020**	CH-47C		07/23/1971			Converted to D Model		06/26/1991	91-00258	CH-47D
B663	**70-15021**	CH-47C		08/16/1971			Converted to D Model		07/17/1990	90-00211	CH-47D
B664	**70-15022**	CH-47C		08/23/1971			Converted to D Model		07/02/1986	86-01682	CH-47D
B665	**70-15023**	CH-47C		08/30/1971			Converted to D Model		07/31/1989	89-00163	CH-47D
B666	**70-15024**	CH-47C		09/17/1971			Converted to D Model		05/21/1991	91-00253	CH-47D
B667	**70-15025**	CH-47C		09/24/1971			Converted to D Model		12/19/1984	85-24325	CH-47D
B668	**70-15026**	CH-47C		09/28/1971			Converted to D Model		05/14/1991	91-00252	CH-47D
B669	**70-15027**	CH-47C		10/12/1971			Converted to D Model		09/19/1989	89-00168	CH-47D
B670	**70-15028**	CH-47C		10/14/1971			Converted to D Model		04/27/1990	90-00200	CH-47D
B671	**70-15029**	CH-47C		10/20/1971			Converted to E Model		01/10/1992	92-00401	MH-47E
B672	**70-15030**	CH-47C		11/01/1971			Converted to E Model		02/21/1992	92-00403	MH-47E
B673	**70-15031**	CH-47C		11/16/1971			Converted to MH-47D		03/30/1989	89-00146	MH-47D
B674	**70-15032**	CH-47C		11/30/1971			Converted to D Model		05/29/1991	91-00254	CH-47D
B675	**70-15033**	CH-47C		12/16/1971			Converted to D Model		12/14/1990	91-00232	CH-47D
B676	**70-15034**	CH-47C		12/17/1971			Converted to D Model		03/21/1983	83-24109	CH-47D

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
B677	**70-15035**	CH-47C		12/22/1971			Accident/Destroyed [Germany]	06/13/1975				
B678	**71-20944**	CH-47C		01/12/1972			Accident/Destroyed [US]	01/12/1972				
B679	**71-20945**	CH-47C		02/17/1972			Converted to D Model		12/21/1988	89-00133	CH-47D	
B680	**71-20946**	CH-47C		03/28/1972			Converted to E Model		05/15/1992	92-00469	MH-47E	
B681	**71-20947**	CH-47C		04/17/1972			Converted to D Model		08/31/1984	84-24177	CH-47D	
B682	**71-20948**	CH-47C		06/29/1972			Converted to D Model		01/29/1991	91-00237	CH-47D	
B683	**71-20949**	CH-47C		07/14/1972			Converted to D Model		11/14/1990	90-00225	CH-47D	
B684	**71-20950**	CH-47C		07/31/1972			Converted to E Model		06/01/1992	92-00470	MH-47E	
B685	**71-20951**	CH-47C		07/21/1972			Converted to E Model		08/25/1992	92-00475	MH-47E	
B686	**71-20952**	CH-47C		09/29/1972			Converted to D Model		08/26/1988	88-00097	CH-47D	
B687	**71-20953**	CH-47C		10/31/1972			Converted to D Model		11/30/1990	91-00230	CH-47D	
B688	**71-20954**	CH-47C		12/20/1973			Converted to E Model		10/16/1992	92-00476	MH-47E	
B689	**71-20955**	CH-47C		07/31/1974			Converted to D Model		02/02/1990	90-00188	CH-47D	
B690	**74-22271**	CH-47C		01/30/1975			Converted to D Model		12/07/1989	90-00181	CH-47D	
B691	**74-22272**	CH-47C		05/19/1975			Converted to D Model		12/14/1989	90-00182	CH-47D	
B692	**74-22273**	CH-47C		05/30/1975			Converted to D Model		02/23/1990	90-00191	CH-47D	
B693	**74-22274**	CH-47C		06/20/1975			Converted to D Model		03/02/1990	90-00192	CH-47D	
B694	**74-22275**	CH-47C		06/30/1975			Accident/Destroyed [Korea]	02/16/1984				
B695	**74-22276**	CH-47C		08/15/1975			Converted to E Model		01/31/1992	92-00402	MH-47E	
B696	**74-22277**	CH-47C		08/22/1975			Converted to E Model		10/25/1991	91-00500	MH-47E	
B697	**74-22278**	CH-47C		09/30/1975			Converted to D Model		08/28/1989	89-00165	CH-47D	
B698	**74-22279**	CH-47C		11/21/1975			Converted to D Model		06/23/1989	89-00158	CH-47D	
B699	**74-22280**	CH-47C		12/19/1975			Converted to D Model		12/07/1990	91-00231	CH-47D	
B700	**74-22281**	CH-47C		01/19/1976			Converted to E Model		11/15/1991	91-00501	MH-47E	
B701	**74-22282**	CH-47C		02/13/1976			Converted to D Model		02/26/1991	91-00241	CH-47D	
B702	**74-22283**	CH-47C		02/27/1976			Converted to E Model		03/06/1992	92-00464	MH-47E	
B703	**74-22284**	CH-47C		03/23/1976			Converted to D Model		06/05/1991	91-00255	CH-47D	
B704	**74-22285**	CH-47C		04/27/1976			Converted to E Model		04/03/1992	92-00466	MH-47E	
B705	**74-22286**	CH-47C		04/30/1976			Converted to D Model		11/30/1989	90-00180	CH-47D	
B706	**74-22287**	CH-47C		06/30/1976			Converted to D Model		05/25/1990	90-00204	CH-47D	
B707	**74-22288**	CH-47C		07/26/1976			Converted to E Model		09/13/1991	91-00498	MH-47E	
B708	**74-22289**	CH-47C		08/31/1976			Converted to E Model		08/22/1991	91-00497	MH-47E	
B709	**74-22290**	CH-47C		08/31/1976			Accident/Destroyed [US]	07/17/1980				
B710	**74-22291**	CH-47C		10/27/1976			Converted to D Model		06/19/1991	91-00257	CH-47D	
B711	**74-22292**	CH-47C		10/29/1976			Accident/Destroyed [Germany]	09/11/1982				
B712	**74-22293**	CH-47C		11/29/1976			Converted to D Model		05/11/1990	90-00202	CH-47D	
B713	**74-22294**	CH-47C		12/17/1976			Converted to D Model		03/16/1990	90-00194	CH-47D	
B714	**76-22673**	CH-47C		12/17/1976			Converted to D Model		02/05/1991	91-00238	CH-47D	
B715	**76-22674**	CH-47C		01/21/1977			Converted to D Model		02/12/1991	91-00239	CH-47D	
B716	**76-22675**	CH-47C		02/24/1977			Converted to D Model		01/19/1989	89-00136	CH-47D	
B717	**76-22676**	CH-47C		03/11/1977			Converted to D Model		04/20/1990	90-00199	CH-47D	
B718	**76-22677**	CH-47C		04/11/1977			Converted to E Model		03/20/1992	92-00465	MH-47E	
B719	**76-22678**	CH-47C		05/10/1977			Converted to D Model		05/04/1989	89-00151	CH-47D	
B720	**76-22679**	CH-47C		06/17/1977			Converted to E Model		05/01/1992	92-00468	MH-47E	
B721	**76-22680**	CH-47C		07/27/1977			Converted to D Model		03/26/1991	91-00245	CH-47D	
B722	**76-22681**	CH-47C		08/31/1978			Converted to E Model		07/11/1991	91-00496	MH-47E	
B723	**76-22682**	CH-47C		09/23/1977			Converted to D Model		04/13/1990	90-00198	CH-47D	
B724	**76-22683**	CH-47C		11/02/1977			Converted to D Model		06/11/1990	90-00206	CH-47D	
B725	**76-22684**	CH-47C		01/11/1978			Converted to D Model		05/11/1989	89-00152	CH-47D	
B726	**79-23394**	CH-47C		11/27/1979			Converted to E Model		07/14/1992	92-00473	MH-47E	
B727	**79-23395**	CH-47C		12/18/1979			Converted to D Model		08/21/1990	90-00213	CH-47D	
B728	**79-23396**	CH-47C		03/27/1980			Converted to E Model		04/17/1992	92-00467	MH-47E	

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
B729	**79-23397**	CH-47C		06/30/1980			Converted to D Model		11/21/1990	90-00226	CH-47D	
B730	**79-23398**	CH-47C		02/08/1980			Converted to D Model		11/07/1988	88-00107	CH-47D	
B731	**79-23399**	CH-47C		04/29/1980			Converted to D Model		03/05/1991	91-00242	CH-47D	
B732	**79-23400**	CH-47C		05/28/1980			Converted to D Model		03/19/1991	91-00244	CH-47D	
B733	**79-23401**	CH-47C		05/30/1980			Converted to D Model		03/12/1991	91-00243	CH-47D	
B734	**85-24734**	CH-47C		08/09/1985			Converted to E Model		06/29/1992	92-00472	MH-47E	
B735	**85-24735**	CH-47C		08/09/1985			Converted to D Model		04/24/1992	92-00291	CH-47D	
B736	**85-24736**	CH-47C		08/09/1985			Converted to D Model		12/17/1991	92-00281	CH-47D	
B737	**85-24737**	CH-47C		08/09/1985			Converted to D Model		09/16/1992	92-00300	CH-47D	
B738	**85-24738**	CH-47C		08/13/1985			Converted to D Model		11/04/1992	92-00306	CH-47D	
B739	**85-24739**	CH-47C		08/15/1985			Converted to D Model		03/13/1992	92-00288	CH-47D	
B740	**85-24740**	CH-47C		08/13/1985			Converted to D Model		01/17/1992	92-00283	CH-47D	
B741	**85-24741**	CH-47C		08/09/1985			Converted to D Model		02/07/1992	92-00285	CH-47D	
B742	**85-24742**	CH-47C		08/13/1985			Converted to D Model		06/08/1992	92-00294	CH-47D	
B743	**85-24743**	CH-47C		08/15/1985			Converted to E Model		08/15/1985	92-00477	MH-47E	
B744	**85-24744**	CH-47C		08/15/1985			Converted to D Model		08/15/1985	92-00297	CH-47D	
CE005	**A15-0005**	CH-47C					Converted to D Model			93-00928	CH-47D	
CE006	**A15-0007**	CH-47C					Converted to D Model			93-00929	CH-47D	
CE007	**A15-0008**	CH-47C					Converted to D Model			93-00930	CH-47D	
CE008	**A15-0009**	CH-47C					Converted to D Model			93-00931	CH-47D	
CE009	**A15-0010**	CH-47C					Converted to D Model			93-00932	CH-47D	
CE010	**A15-0011**	CH-47C					Converted to D Model			93-00933	CH-47D	
CE011	**A15-0012**	CH-47C					Converted to D Model			93-00934	CH-47D	
	76-08008	YCH-47D		12/01/1976	CH-47A	65-08008	Converted to D Model		10/21/1992	92-00304	CH-47D	
	76-18479	YCH-47D		12/01/1976	CH-47B	67-18479	Trainer - Ft Eustis VA					
	76-18538	YCH-47D		12/01/1976	CH-47C	67-18538	Converted to D Model		10/14/1992	92-00303	CH-47D	
M3004	**81-23381**	CH-47D		03/31/1982	CH-47A	66-19025	Category B Trainer - Ft Rucker AL					
M3005	**81-23382**	CH-47D		07/16/1982	CH-47A	66-19052	Inducted to F Model Program		12/14/2005	06-08021	CH-47F	
M3006	**81-23383**	CH-47D		11/24/1982	CH-47A	66-19017	Inducted to F Model Program		03/22/2006	06-08026	CH-47F	
M3007	**81-23384**	CH-47D		11/30/1982	CH-47A	66-19057	Inducted to F Model Program		09/12/2006	06-08029	CH-47F	
M3008	**81-23385**	CH-47D		12/18/1982	CH-47A	66-19073	Converted to G Model		12/22/2004	05-03753	MH-47G	
M3009	**81-23386**	CH-47D		12/22/1982	CH-47A	66-19088	Converted to G Model		10/10/2005	06-03763	MH-47G	
M3010	**81-23387**	CH-47D		03/12/1983	CH-47A	64-13134	Converted to G Model		12/13/2004	05-03752	MH-47G	
M3011	**81-23388**	CH-47D		02/20/1983	CH-47A	64-13132	Converted to G Model		02/22/2005	05-03757	MH-47G	
M3012	**81-23389**	CH-47D		04/13/1983	CH-47A	64-13133	Inducted to F Model Program		02/06/2006	06-08024	CH-47F	
M3013	**82-23762**	CH-47D		04/30/1983	CH-47A	66-00122	Converted to G Model		03/10/2005	05-03758	MH-47G	
M3015	**82-23764**	CH-47D		06/29/1983	CH-47A	65-08011	Accident/Destroyed [US]	07/24/1990				
M3016	**82-23765**	CH-47D		07/11/1983	CH-47A	66-00119	Inducted to F Model Program		02/11/2009	09-08063	CH-47F	
M3017	**82-23766**	CH-47D		07/07/1983	CH-47A	66-19058	Converted to G Model		12/03/2004	05-03751	MH-47G	
M3018	**82-23767**	CH-47D		07/22/1983	CH-47A	66-19043	Converted to G Model		04/15/2005	05-03761	MH-47G	
M3019	**82-23768**	CH-47D		08/09/1983	CH-47A	66-00106	Cat B Trainer - Ft Eustis VA					
M3020	**82-23769**	CH-47D		09/26/1983	CH-47A	65-08005	Inducted to F Model Program		03/22/2007	07-08035	CH-47F	
M3021	**82-23770**	CH-47D		09/21/1983	CH-47A	66-00108	Converted to G Model		06/29/2004	04-03746	MH-47G	
M3022	**82-23771**	CH-47D		10/19/1983	CH-47A	66-19074	Inducted to F Model Program		06/26/2007	07-08039	CH-47F	
M3023	**82-23772**	CH-47D		10/20/1983	CH-47A	66-00116	Converted to G Model		12/11/2003	04-03736	MH-47G	
M3024	**82-23773**	CH-47D		11/01/1983	CH-47C	68-16002	Converted to G Model		06/15/2004	04-03745	MH-47G	
M3025	**82-23774**	CH-47D		11/08/1983	CH-47A	64-13144	Converted to G Model		12/08/2003	04-03735	MH-47G	
M3026	**82-23775**	CH-47D		12/05/1983	CH-47A	66-19031	Inducted to F Model Program		09/30/2005	05-08015	CH-47F	
M3027	**82-23776**	CH-47D		12/16/1983	CH-47A	66-00115	Inducted to F Model Program		05/18/2007	07-08038	CH-47F	
M3028	**82-23777**	CH-47D		12/16/1983	CH-47A	66-19072	Inducted to F Model Program		10/20/2005	05-08016	CH-47F	
M3029	**82-23778**	CH-47D		01/24/1984	CH-47C	69-17104	Converted to G Model		01/24/2007	07-03769	MH-47G	
M3030	**82-23779**	CH-47D		02/02/1984	CH-47C	68-16009	Converted to G Model		04/06/2005	05-03760	MH-47G	

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M3031	**82-23780**	CH-47D		02/23/1984	CH-47C	67-18531	Converted to G Model		07/28/2003	03-03734	MH-47G	
M3032	**83-24102**	CH-47D		02/23/1984	CH-47B	66-19137	Converted to G Model		03/31/2004	04-03739	MH-47G	
M3033	**83-24103**	CH-47D		03/09/1984	CH-47C	69-17126	Inducted to F Model Program		12/01/2006	06-08032	CH-47F	
M3034	**83-24104**	CH-47D		01/30/1984	CH-47A	64-13115	Inducted to F Model Program		08/09/2005	05-08013	CH-47F	
M3035	**83-24105**	CH-47D		04/13/1984	CH-47B	67-18483	Inducted to F Program/FwdFuselage On Display RAF Museum		03/23/2005	06-08022	CH-47F	
M3036	**83-24106**	CH-47D		04/26/1984	CH-47C	69-17102	Converted to G Model		05/30/2003	03-03732	MH-47G	
M3037	**83-24107**	CH-47D		05/15/1984	CH-47A	63-07922	Converted to Prototype F Model EMD#1		01/05/1999	98-00011	YCH-47F	
M3038	**83-24108**	CH-47D		05/22/1984	CH-47B	67-18464	Converted to G Model		01/27/2005	05-03755	MH-47G	
M3039	**83-24109**	CH-47D		06/14/1984	CH-47C	70-15034	Inducted to F Model Program		09/21/2009	08-08058	CH-47F	
M3041	**83-24111**	CH-47D		07/13/1984	CH-47A	63-07923	Inducted to F Model Program		03/08/2007	07-08033	CH-47F	
M3042	**83-24112**	CH-47D		08/02/1984	CH-47B	67-18460	Converted to G Model		01/17/2005	05-03754	MH-47G	
M3043	**83-24113**	CH-47D		08/02/1984	CH-47C	68-15813	Inducted to F Model Program		04/30/2007	07-08037	CH-47F	
M3044	**83-24114**	CH-47D		09/10/1984	CH-47A	64-13112	Inducted to F Model Program		07/18/2007	07-08040	CH-47F	
M3045	**83-24115**	CH-47D		09/29/1984	CH-47B	67-18456	Converted to Prototype F Model EMD#2		01/05/1999	98-00012	YCH-47F	
M3046	**83-24116**	CH-47D		10/04/1984	CH-47C	68-15996	Converted to G Model		06/27/2003	03-03733	MH-47G	
M3047	**83-24117**	CH-47D		10/11/1984	CH-47A	64-13118	Converted to G Model		03/22/2005	05-03759	MH-47G	
M3049	**83-24119**	CH-47D		11/14/1984	CH-47C	68-16014	Inducted to F Model Program		12/13/2005	06-08020	CH-47F	
M3050	**83-24120**	CH-47D		11/09/1984	CH-47A	64-13122	Inducted to F Model Program		04/09/2007	07-08036	CH-47F	
M3051	**83-24121**	CH-47D		11/20/1984	CH-47C	67-18541	Converted to Prototype F Model EMD#1		01/08/2003	03-08003	YCH-47F	
M3052	**83-24122**	CH-47D		11/30/1984	CH-47C	68-16001	Inducted to F Model Program		11/20/2007	08-08042	CH-47F	
M3053	**83-24123**	CH-47D		12/07/1984	CH-47A	64-13127	Accident/Destroyed [OEF]	08/10/2007				
M3054	**83-24124**	CH-47D		12/14/1984	CH-47C	69-17109	Reserve - VA					
M3055	**83-24125**	CH-47D		12/18/1984	CH-47A	64-13108	Inducted to F Model Program		04/06/2006	06-08027	CH-47F	
M3056	**84-24152**	CH-47D		01/18/1985	CH-47C	68-15991	Converted to G Model		10/08/2002	03-03728	MH-47G	
M3057	**84-24153**	CH-47D		01/22/1985	CH-47A	64-13120	Inducted to F Model Program		04/02/2009	09-08065	CH-47F	
M3058	**84-24154**	CH-47D		02/19/1985	CH-47A	64-13140	Sold to Canada	08/05/2010				
M3059	**84-24155**	CH-47D		02/20/1985	CH-47C	70-15017	Inducted to F Model Program		12/17/2007	08-08044	CH-47F	
M3060	**84-24156**	CH-47D		02/27/1985	CH-47A	64-13113	Accident/Destroyed [US]	04/11/1997				
M3061	**84-24157**	CH-47D		03/12/1985	CH-47A	65-07978	Accident/Destroyed [US]	04/01/2011				
M3062	**84-24158**	CH-47D		03/22/1985	CH-47C	70-15014	Active - Camp Humphries					
M3063	**84-24159**	CH-47D		03/22/1985	CH-47A	64-13125	Guard - NV/MT*					
M3064	**84-24160**	CH-47D		03/29/1985	CH-47A	66-19020	Converted to G Model		05/03/2005	05-03762	MH-47G	
M3065	**84-24161**	CH-47D		04/08/1985	CH-47C	70-15016	Converted to G Model		05/02/2003	03-03731	MH-47G	
M3066	**84-24162**	CH-47D		04/23/1985	CH-47A	64-13129	Guard - IL					
M3067	**84-24163**	CH-47D		04/24/1985	CH-47A	64-13150	Inducted to F Model Program		05/05/2008	08-08051	CH-47F	
M3068	**84-24164**	CH-47D		07/03/1985	CH-47C	68-15830	Inducted to F Model Program		08/02/2006	06-08028	CH-47F	
M3069	**84-24165**	CH-47D		08/13/1985	CH-47A	64-13126	Inducted to F Model Program		07/30/2009	08-08053	CH-47F	
M3070	**84-24166**	CH-47D			CH-47A	64-13160	Accident/Destroyed [US]	07/07/1985				
M3071	**84-24167**	CH-47D		08/14/1985	CH-47C	67-18537	Depot - Philadelphia PA					
M3072	**84-24168**	CH-47D		08/26/1985	CH-47A	64-13123	Active - Ft Rucker AL					
M3073	**84-24169**	CH-47D		08/16/1985	CH-47A	65-07990	Inducted to F Model Program		01/13/2006	06-08019	CH-47F	
M3074	**84-24170**	CH-47D		09/07/1985	CH-47C	70-15001	Cat B Trainer - Ft Eustis VA					
M3075	**84-24171**	CH-47D		08/28/1985	CH-47A	64-13117	Converted to G Model		01/21/2004	04-03737	MH-47G	
M3076	**84-24172**	CH-47D		09/11/1985	CH-47A	66-19055	Guard - WA					
M3077	**84-24173**	CH-47D		09/18/1985	CH-47C	68-15840	Inducted to F Model Program		10/20/2006	06-08031	CH-47F	
M3078	**84-24174**	CH-47D		10/01/1985	CH-47A	64-13121	Accident/Destroyed [OEF]	01/28/2002				
M3079	**84-24175**	CH-47D		10/03/1985	CH-47C	69-17113	Destroyed by Enemy Action [OEF]	08/06/2011				
M3080	**84-24176**	CH-47D		10/17/1985	CH-47A	66-19008	Inducted to F Model Program		05/18/2010	10-08080	CH-47F	
M3081	**84-24177**	CH-47D		10/17/1985	CH-47C	71-20947	Accident/Destroyed [Desert Storm]	03/01/1991				
M3082	**84-24178**	CH-47D		10/22/1985	CH-47A	64-13119	Inducted to F Model Program		08/15/2012	12-08110		
M3083	**84-24179**	CH-47D		10/26/1985	CH-47C	70-15006	Inducted to F Model Program		04/24/2011	11-08092	CH-47F	
M3084	**84-24180**	CH-47D		10/25/1985	CH-47A	64-13130	Converted to G Model		11/30/2005	04-03748	MH-47G	

Appendix A - H-47 Serial Number Database as of 01 November 2012

Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3085	**84-24181**	CH-47D		10/31/1985	CH-47C	67-18550	Sold to Canada				
M3086	**84-24182**	CH-47D		10/31/1985	CH-47A	62-02135	Inducted to F Model Program		04/20/2009	09-08066	CH-47F
M3087	**84-24183**	CH-47D		11/05/1985	CH-47C	70-15019	Guard - OH*				
M3088	**84-24184**	CH-47D		11/19/1985	CH-47A	62-02137	Inducted to F Model Program		03/09/2007	07-08034	CH-47F
M3089	**84-24185**	CH-47D		11/22/1985	CH-47C	70-15013	Inducted to F Model Program		01/14/2008	08-08045	CH-47F
M3090	**84-24186**	CH-47D		11/27/1985	CH-47A	63-07918	Inducted to F Model Program		08/13/2007	07-08041	CH-47F
M3091	**84-24187**	CH-47D		12/05/1985	CH-47C	68-16020	Guard - OK				
M3092	**85-24322**	CH-47D		12/07/1985	CH-47A	65-07983	Inducted to F Model Program		10/10/2005	05-08017	CH-47F
M3093	**85-24323**	CH-47D		12/13/1985	CH-47A	65-07981	Inducted to F Model Program		08/02/2010	10-08083	CH-47F
M3094	**85-24324**	CH-47D		12/19/1985	CH-47A	66-19021	Guard - OH				
M3095	**85-24325**	CH-47D		12/23/1985	CH-47C	70-15025	Accident/Destroyed [US]	04/09/1986			
M3096	**85-24326**	CH-47D		12/31/1985	CH-47A	65-07982	Guard - NE				
M3097	**85-24327**	CH-47D		01/29/1986	CH-47A	66-19026	Inducted to F Model Program		04/02/2012	12-08106	CH-47F
M3098	**85-24328**	CH-47D		01/25/1986	CH-47C	69-17111	Inducted to F Model Program		02/21/2008	08-08047	CH-47F
M3099	**85-24329**	CH-47D		01/25/1986	CH-47A	66-19036	Guard - MI				
M3100	**85-24330**	CH-47D		01/25/1986	CH-47A	66-19051	Inducted to F Model Program		06/24/2009	09-08071	CH-47F
M3101	**85-24331**	CH-47D		02/11/1986	CH-47C	68-16010	Inducted to F Model Program		01/14/2010	10-08076	CH-47F
M3102	**85-24332**	CH-47D		02/26/1986	CH-47A	66-00123	Accident/Destroyed [Honduras]	12/08/1988			
M3103	**85-24333**	CH-47D		02/27/1986	CH-47A	65-08017	Inducted to F Model Program		05/14/2009	09-08067	CH-47F
M3104	**85-24334**	CH-47D		03/06/1986	CH-47C	69-17112	Depot - Philadelphia PA				
M3105	**85-24335**	CH-47D		03/12/1986	CH-47A	65-08014	Accident/Destroyed [OIF]	07/02/2005			
M3106	**85-24336**	CH-47D		03/22/1986	CH-47A	66-00124	Guard - OH*				
M3107	**85-24337**	CH-47D		03/27/1986	CH-47C	67-18509	Guard - IL*				
M3108	**85-24338**	CH-47D		03/31/1986	CH-47A	65-07979	Reserve - VA				
M3109	**85-24339**	CH-47D		03/31/1986	CH-47A	65-08019	Inducted to F Model Program		11/22/2008	09-08062	CH-47F
M3110	**85-24340**	CH-47D		04/29/1986	CH-47C	69-17121	Converted to Trainer				
M3111	**85-24341**	CH-47D		04/29/1986	CH-47A	66-00077	Converted to G Model		09/15/2004	04-03749	MH-47G
M3113	**85-24343**	CH-47D		04/30/1986	CH-47C	68-15850	Inducted to F Model Program		11/10/2008	09-08060	CH-47F
M3114	**85-24344**	CH-47D		04/30/1986	CH-47A	66-00107	Inducted to F Model Program		12/23/2005	06-08018	CH-47F
M3115	**85-24345**	CH-47D		05/13/1986	CH-47A	66-00090	Depot - Philadelphia PA				
M3116	**85-24346**	CH-47D		05/15/1986	CH-47C	67-18504	Reserve - KS				
M3117	**85-24347**	CH-47D		05/27/1986	CH-47A	66-00089	Inducted to F Model Program		11/08/2011	12-08100	CH-47F
M3118	**85-24348**	CH-47D		05/27/1986	CH-47A	66-00101	Accident/Destroyed [OIF]	07/01/2010			
M3119	**85-24349**	CH-47D		05/30/1986	CH-47C	68-15839	Accident/Destroyed [OEF]	05/05/2006			
M3120	**85-24350**	CH-47D		05/31/1986	CH-47A	66-19060	Inducted to F Model Program		06/10/2009	09-08068	CH-47F
M3121	**85-24351**	CH-47D		06/14/1986	CH-47A	65-07971	Converted to Trainer				
M3122	**85-24352**	CH-47D		06/20/1986	CH-47C	68-15843	Converted to G Model		02/08/2003	03-03729	MH-47G
M3123	**85-24353**	CH-47D		06/25/1986	CH-47A	65-08018	Inducted to F Model Program		06/10/2010	10-08082	CH-47F
M3124	**85-24354**	CH-47D		06/26/1986	CH-47A	66-19009	Cat B Trainer - Ft Eustis VA				
M3125	**85-24355**	CH-47D		07/10/1986	CH-47C	68-15861	Converted to G Model		03/19/2003	03-03730	MH-47G
M3126	**85-24356**	CH-47D		07/16/1986	CH-47A	66-19000	Converted to G Model		08/17/2004	04-03747	MH-47G
M3127	**85-24357**	CH-47D		07/25/1986	CH-47A	66-00093	Converted to G Model		02/11/2004	04-03738	MH-47G
M3128	**85-24358**	CH-47D		07/28/1986	CH-47C	70-15011	Converted to G Model		10/07/2002	03-03727	MH-47G
M3129	**85-24359**	CH-47D		08/01/1986	CH-47A	66-19066	Converted to G Model		02/08/2005	05-03756	MH-47G
M3132	**85-24362**	CH-47D		09/15/1986	CH-47A	66-19024	Depot - Philadelphia PA				
M3133	**85-24363**	CH-47D		09/25/1986	CH-47A	66-19077	Inducted to F Model Program		02/10/2006	06-08030	CH-47F
M3134	**85-24364**	CH-47D		09/29/1986	CH-47C	68-16013	Converted to G Model		04/22/2004	04-03750	MH-47G
M3135	**85-24365**	CH-47D		09/29/1986	CH-47A	65-08002	Converted to G Model		04/22/2004	04-03740	MH-47G
M3136	**85-24366**	CH-47D		09/30/1986	CH-47A	65-07977	Inducted to F Model Program		06/01/2006	06-08025	CH-47F
M3138	**85-24368**	CH-47D		10/24/1986	CH-47A	66-19044	Cat B Trainer - Ft Eustis VA				
M3139	**85-24369**	CH-47D		10/30/1986	CH-47A	66-19054	Inducted to F Model Program		07/17/2009	09-08072	CH-47F
M3141	**86-01636**	CH-47D		11/26/1986	CH-47A	65-08023	Converted to G Model		05/12/2004	04-03741	MH-47G

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3142	**86-01637**	CH-47D		11/26/1986	CH-47B	67-18438	Converted to G Model		05/27/2004	04-03742	MH-47G
M3143	**86-01638**	CH-47D		11/26/1986	CH-47A	64-13159	Active - Soto Cano AB				
M3144	**86-01639**	CH-47D		11/26/1986	CH-47A	65-07984	Cat B Trainer - Ft Eustis VA				
M3145	**86-01640**	CH-47D		12/03/1986	CH-47B	67-18439	Inducted to F Model Program		01/19/2006	06-08023	CH-47F
M3146	**86-01641**	CH-47D		12/22/1986	CH-47A	64-13164	Depot - Philadelphia PA				
M3147	**86-01642**	CH-47D		12/18/1986	CH-47A	66-19048	Guard - MD/NY*				
M3148	**86-01643**	CH-47D		12/23/1986	CH-47B	66-19121	Accident/Destroyed [US]	02/25/1988			
M3149	**86-01644**	CH-47D		01/20/1987	CH-47A	65-08004	Destroyed by Enemy Action [OEF]	05/30/2007			
M3150	**86-01645**	CH-47D		01/22/1987	CH-47A	65-08020	Cat B Trainer - Ft Eustis VA				
M3151	**86-01646**	CH-47D		01/29/1987	CH-47B	66-19115	Guard - MD/NY*				
M3152	**86-01647**	CH-47D		02/09/1987	CH-47A	66-00074	Accident/Destroyed [US]	06/15/2010			
M3153	**86-01648**	CH-47D		02/10/1987	CH-47A	65-08013	Inducted to F Model Program		02/04/2008	08-08046	CH-47F
M3154	**86-01649**	CH-47D		02/17/1987	CH-47B	67-18472	Inducted to F Model Program		11/26/2008	09-08064	CH-47F
M3155	**86-01650**	CH-47D		02/27/1987	CH-47A	66-00103	Sold to Canada				
M3156	**86-01651**	CH-47D		02/27/1987	CH-47A	65-08015	Sold to Canada				
M3157	**86-01652**	CH-47D		03/31/1987	CH-47B	67-18451	Inducted to F Model Program		03/24/2008	08-08049	CH-47F
M3158	**86-01653**	CH-47D		03/31/1987	CH-47A	65-07993	Guard - MD/NY*				
M3159	**86-01654**	CH-47D		03/31/1987	CH-47A	66-19028	Active - Camp Humphries				
M3160	**86-01655**	CH-47D		03/31/1987	CH-47B	66-19114	Inducted to F Model Program		06/24/2008	08-08055	CH-47F
M3161	**86-01656**	CH-47D		04/08/1987	CH-47A	65-07980	Inducted to F Model Program		08/18/2011	11-08097	CH-47F
M3162	**86-01657**	CH-47D		04/27/1987	CH-47A	65-08009	Inducted to F Model Program		08/28/2009	08-08050	CH-47F
M3163	**86-01658**	CH-47D		04/30/1987	CH-47B	66-19125	Inducted to F Model Program		08/28/2009	08-08056	CH-47F
M3164	**86-01659**	CH-47D		05/28/1987	CH-47A	66-00102	Active - Ft Riley KS				
M3165	**86-01660**	CH-47D		05/28/1987	CH-47A	65-07995	Active - Ft Rucker AL				
M3166	**86-01661**	CH-47D		05/29/1987	CH-47B	66-19140	Inducted to F Model Program		03/23/2010	10-08078	CH-47F
M3167	**86-01662**	CH-47D		05/29/1987	CH-47A	64-13142	Inducted to F Model Program		10/14/2010	10-08086	CH-47F
M3168	**86-01663**	CH-47D		06/19/1987	CH-47A	64-13155	Guard - OH*				
M3169	**86-01664**	CH-47D		06/19/1987	CH-47B	66-19133	Cat B Trainer - Ft Eustis VA				
M3170	**86-01665**	CH-47D		06/24/1987	CH-47A	66-00114	Reserve - VA				
M3171	**86-01666**	CH-47D		06/26/1987	CH-47C	67-18522	Guard -NV				
M3172	**86-01667**	CH-47D		07/08/1987	CH-47A	65-07967	Inducted to F Model Program		12/07/2011	12-08101	CH-47F
M3173	**86-01668**	CH-47D		07/23/1987	CH-47A	66-00075	Cat B Trainer - Ft Eustis VA				
M3174	**86-01669**	CH-47D		07/23/1987	CH-47B	67-18444	Inducted to F Model Program		10/08/2009	10-08085	CH-47F
M3175	**86-01670**	CH-47D		07/29/1987	CH-47A	66-19087	Active - Ft Rucker AL				
M3176	**86-01671**	CH-47D		08/19/1987	CH-47A	66-19096	Inducted to F Model Program		12/09/2010	11-08088	CH-47F
M3177	**86-01672**	CH-47D		08/20/1987	CH-47B	67-18448	Inducted to F Model Program		10/12/2011	11-8099	CH-47F
M3178	**86-01673**	CH-47D		08/28/1987	CH-47A	66-19097	Inducted to F Model Program		09/15/2011	11-08098	CH-47F
M3179	**86-01674**	CH-47D		08/31/1987	CH-47A	66-00104	Reserve - KS				
M3180	**86-01675**	CH-47D		09/23/1987	CH-47B	66-19107	Inducted to F Model Program		07/30/2008	08-08057	CH-47F
M3181	**86-01676**	CH-47D		09/24/1987	CH-47A	64-13135	Active - Redstone Arsenal AL				
M3182	**86-01677**	CH-47D		09/28/1987	CH-47A	66-19030	Inducted to F Model Program		01/14/2011	09-08089	CH-47F
M3183	**86-01678**	CH-47D		09/29/1987	CH-47C	68-15855	Converted to G Model		10/05/2000	00-02160	MH-47G
M3184	**86-01679**	CH-47D		10/16/1987	CH-47A	65-07991	Converted to G Model		06/15/2004	04-03743	MH-47G
M3185	**86-01680**	CH-47D		10/23/1987	CH-47A	65-08003	Active - Ft Rucker AL				
M3186	**86-01681**	CH-47D		10/29/1987	CH-47A	65-08012	Accident/Destroyed [US]	04/24/1995			
M3187	**86-01682**	CH-47D		10/31/1987	CH-47C	70-15022	Guard - NY				
M3188	**87-00069**	CH-47D		11/19/1987	CH-47A	66-00097	Trainer - Ft Eustis VA				
M3189	**87-00070**	CH-47D		11/23/1987	CH-47A	61-02424	Guard - NE				
M3190	**87-00071**	CH-47D		11/30/1987	CH-47B	67-18471	Guard - IL				
M3191	**87-00072**	CH-47D		11/30/1987	CH-47A	64-13165	Active - Ft Riley KS				
M3192	**87-00073**	CH-47D		12/23/1987	CH-47B	67-18446	Accident/Destroyed [OEF]	10/01/2012			
M3193	**87-00074**	CH-47D		12/22/1987	CH-47A	61-02422	Active - Ft Rucker AL				

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3194	**87-00075**	CH-47D		11/22/1987	CH-47B	66-19102	Guard - NV/MT*				
M3195	**87-00076**	CH-47D		12/23/1987	CH-47A	62-02117	Active - Ft Rucker AL				
M3196	**87-00077**	CH-47D		01/30/1988	CH-47B	66-19132	Guard - CO				
M3197	**87-00078**	CH-47D		01/31/1988	CH-47B	67-18436	Guard - OH*				
M3198	**87-00079**	CH-47D		02/05/1988	CH-47B	66-19120	Guard - SC				
M3199	**87-00080**	CH-47D		02/10/1988	CH-47A	62-02118	Reserve - WA				
M3200	**87-00081**	CH-47D		02/23/1988	CH-47B	67-18477	Inducted to F Model Program		07/29/2009	08-08054	CH-47F
M3201	**87-00082**	CH-47D		02/26/1988	CH-47A	63-07919	Inducted to F Model Program		07/22/2011	11-08096	CH-47F
M3202	**87-00083**	CH-47D		02/29/1988	CH-47B	67-18466	Inducted to F Model Program		02/12/2010	10-08077	CH-47F
M3203	**87-00084**	CH-47D		03/22/1988	CH-47A	62-02132	Cat B Trainer - Ft Eustis VA				
M3204	**87-00085**	CH-47D		03/29/1988	CH-47B	67-18453	Inducted to F Model Program		06/03/2010	10-08081	CH-47F
M3205	**87-00086**	CH-47D		03/31/1988	CH-47A	62-02133	Sold to Canada				
M3206	**87-00087**	CH-47D		04/27/1988	CH-47B	66-19111	Inducted to F Model Program		05/20/2008	08-08052	CH-47F
M3207	**87-00088**	CH-47D		04/28/1988	CH-47A	62-02136	Guard - CA				
M3208	**87-00089**	CH-47D		04/27/1988	CH-47B	67-18484	Accident/Destroyed [OEF]	01/01/2011			
M3209	**87-00090**	CH-47D		04/28/1988	CH-47A	63-07902	Active - Ft Rucker AL				
M3210	**87-00091**	CH-47D		04/28/1988	CH-47B	66-19134	Reserve - KS				
M3211	**87-00092**	CH-47D		04/29/1988	CH-47A	63-07903	Reserve - KS				
M3212	**87-00093**	CH-47D		05/26/1988	CH-47B	66-19135	Reserve - KS				
M3213	**87-00094**	CH-47D		05/24/1988	CH-47A	63-07904	Accident/Destroyed [OEF]	06/17/2008			
M3214	**87-00095**	CH-47D		05/27/1988	CH-47B	67-18434	Converted to G Model		06/29/2004	04-03744	MH-47G
M3215	**87-00096**	CH-47D		05/27/1988	CH-47A	63-07906	Leased to Canada				
M3216	**87-00097**	CH-47D		06/21/1988	CH-47B	67-18437	Guard - CO				
M3217	**87-00098**	CH-47D		06/21/1988	CH-47A	63-07907	Guard - NE				
M3218	**87-00099**	CH-47D		06/22/1988	CH-47B	67-18474	Guard - CA				
M3219	**87-00100**	CH-47D		06/27/1988	CH-47A	63-07909	Guard - IL				
M3220	**87-00101**	CH-47D		07/12/1988	CH-47B	66-19119	Guard - TX				
M3221	**87-00102**	CH-47D		07/25/1988	CH-47A	63-07911	Accident/Destroyed [OIF]	05/22/2005			
M3222	**87-00103**	CH-47D		07/25/1988	CH-47B	66-19112	Inducted to F Model Program		03/04/2008	08-08048	CH-47F
M3223	**87-00104**	CH-47D		07/30/1988	CH-47A	63-07914	Guard - MD				
M3224	**87-00105**	CH-47D		08/09/1988	CH-47B	66-19127	Guard - TX				
M3225	**87-00106**	CH-47D		08/18/1988	CH-47A	63-07917	Guard - MT				
M3226	**87-00107**	CH-47D		08/30/1988	CH-47B	67-18432	Guard - IA				
M3227	**87-00108**	CH-47D		08/31/1988	CH-47A	62-02129	Active - Ft Rucker AL				
M3228	**87-00109**	CH-47D		09/20/1988	CH-47B	66-19098	Guard - OH				
M3229	**87-00110**	CH-47D		09/22/1988	CH-47B	67-18463	Reserve -WA				
M3230	**87-00111**	CH-47D		09/28/1988	CH-47B	66-19124	Accident/Destroyed [OEF]	08/12/2012			
M3231	**87-00112**	CH-47D		09/29/1988	CH-47A	63-07920	Inducted to F Model Program		06/21/2012	12-08108	CH-47F
M3232	**87-00113**	CH-47D		09/30/1988	CH-47B	67-18443	Guard - FL				
M3233	**87-00114**	CH-47D		10/25/1988	CH-47B	67-18452	Guard - CA				
M3234	**87-00115**	CH-47D		10/27/1988	CH-47B	67-18459	Guard - FL				
M3235	**87-00116**	CH-47D		10/31/1988	CH-47A	63-07921	Guard - MD				
M3236	**88-00062**	CH-47D		11/28/1988	CH-47B	66-19136	Active - Ft Rucker AL				
M3237	**88-00063**	CH-47D		11/29/1988	CH-47B	66-19141	Reserve - KS				
M3238	**88-00064**	CH-47D		11/30/1988	CH-47B	67-18447	Guard - OK				
M3239	**88-00065**	CH-47D		11/30/1988	CH-47B	67-18491	Guard - OK				
M3240	**88-00066**	CH-47D		12/19/1988	CH-47B	66-19105	Guard - OK				
M3241	**88-00067**	CH-47D		12/21/1988	CH-47B	67-18450	Active - Ft Riley KS				
M3242	**88-00068**	CH-47D		12/28/1988	CH-47B	67-18486	Active - Ft Riley KS				
M3243	**88-00069**	CH-47D		12/22/1988	CH-47B	67-18476	Active - Ft Riley KS				
M3244	**88-00070**	CH-47D		02/08/1989	CH-47B	66-19129	Active - Camp Humphries				
M3245	**88-00071**	CH-47D		02/11/1989	CH-47B	67-18441	Active - Ft Riley KS				

Appendix A - H-47 Serial Number Database as of 01 November 2012

Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3246	**88-00072**	CH-47D		02/08/1989	CH-47B	66-19131	Active - Ft Riley KS				
M3247	**88-00073**	CH-47D		02/14/1989	CH-47B	66-19122	Active - Camp Humphries				
M3248	**88-00074**	CH-47D		02/27/1989	CH-47B	67-18489	Inducted to F Model Program		06/24/2009	09-08069	CH-47F
M3249	**88-00075**	CH-47D		02/28/1989	CH-47B	66-19130	Guard - GA				
M3250	**88-00076**	CH-47D		03/02/1989	CH-47B	67-18492	Inducted to F Model Program		05/27/2011	11-08094	CH-47F
M3251	**88-00077**	CH-47D		03/13/1989	CH-47B	67-18482	Active - Ft Rucker AL				
M3252	**88-00078**	CH-47D		03/22/1989	CH-47B	67-18478	Inducted to F Model Program		12/15/2008	09-08061	CH-47F
M3253	**88-00079**	CH-47D		03/22/1989	CH-47B	67-18440	Guard - NY				
M3254	**88-00080**	CH-47D		03/30/1989	CH-47B	66-19108	Active - Ft Riley KS				
M3255	**88-00081**	CH-47D		04/07/1989	CH-47B	66-19099	Active - Camp Humphries				
M3256	**88-00082**	CH-47D		04/21/1989	CH-47B	67-18454	Guard - OH*				
M3257	**88-00083**	CH-47D		04/27/1989	CH-47B	66-19109	Active - Camp Humphries				
M3259	**88-00085**	CH-47D		04/29/1989	CH-47B	66-19116	Active - Camp Humphries				
M3260	**88-00086**	CH-47D		05/05/1989	CH-47B	67-18488	Active - Ft Rucker AL				
M3261	**88-00087**	CH-47D		05/16/1989	CH-47B	67-18473	Active - Ft Riley KS				
M3262	**88-00088**	CH-47D		05/31/1989	CH-47B	66-19123	Active - Ft Rucker AL				
M3263	**88-00089**	CH-47D		05/31/1989	CH-47B	66-19100	Active - Camp Humphries				
M3264	**88-00090**	CH-47D		06/13/1989	CH-47B	67-18465	Active - Ft Riley KS				
M3265	**88-00091**	CH-47D		06/23/1989	CH-47B	67-18467	Active - Camp Humphries				
M3266	**88-00092**	CH-47D		06/30/1989	CH-47B	66-19104	Accident/Destroyed [Korea]	12/04/1989			
M3267	**88-00093**	CH-47D		06/30/1989	CH-47C	68-15868	Active - Camp Humphries				
M3268	**88-00094**	CH-47D		06/30/1989	CH-47C	68-15851	Active - Camp Humphries				
M3269	**88-00095**	CH-47D		07/27/1989	CH-47C	68-15847	Active - Camp Humphries				
M3270	**88-00096**	CH-47D		07/26/1989	CH-47C	68-16016	Active - Camp Humphries				
M3271	**88-00097**	CH-47D		07/31/1989	CH-47C	71-20952	Active - Ft Riley KS				
M3272	**88-00098**	CH-47D		08/03/1989	CH-47C	69-17116	Accident/Destroyed [OIF]	08/28/2003			
M3273	**88-00099**	CH-47D		11/15/1989	CH-47C	68-15865	Guard - MD/NY*				
M3274	**88-00100**	CH-47D		11/20/1989	CH-47C	68-15867	Accident/Destroyed [OEF]	04/06/2005			
M3275	**88-00101**	CH-47D		11/24/1989	CH-47C	68-15846	Inducted to F Model Program		06/24/2011	11-08095	CH-47f
M3276	**88-00102**	CH-47D		11/29/1989	CH-47C	68-15997	Guard - IL				
M3277	**88-00103**	CH-47D		11/29/1989	CH-47C	68-16006	Reserve - KS				
M3278	**88-00104**	CH-47D		12/04/1989	CH-47C	68-15827	Inducted to F Model Program		10/08/2009	10-08074	CH-47F
M3279	**88-00105**	CH-47D		12/11/1989	CH-47C	68-15995	Trainer - Ft Eustis VA				
M3280	**88-00106**	CH-47D		12/04/1989	CH-47C	68-15831	Guard - MD/NY*				
M3281	**88-00107**	CH-47D		12/20/1989	CH-47C	79-23398	Active - Camp Humphries				
M3282	**88-00108**	CH-47D		12/19/1989	CH-47C	69-17114	Guard - MD				
M3283	**88-00109**	CH-47D		12/19/1989	CH-47C	69-17123	Active - Ft Riley KS				
M3284	**89-00130**	CH-47D		01/19/1990	CH-47C	68-16017	Sold to Canada				
M3286	**89-00132**	CH-47D		12/22/1989	CH-47C	70-15008	Active - Soto Cano AB				
M3287	**89-00133**	CH-47D		01/29/1990	CH-47C	71-20945	Reserve - VA				
M3288	**89-00134**	CH-47D		01/31/1990	CH-47C	67-18505	Active - Soto Cano AB				
M3289	**89-00135**	CH-47D		02/06/1990	CH-47C	68-15820	Cat B Trainer - Ft Eustis VA				
M3290	**89-00136**	CH-47D		02/08/1990	CH-47C	76-22675	Reserve - VA				
M3291	**89-00137**	CH-47D		02/15/1990	CH-47C	67-18517	Reserve - VA				
M3292	**89-00138**	CH-47D		02/27/1990	CH-47C	67-18533	Active - Ft Riley KS				
M3293	**89-00139**	CH-47D		02/28/1990	CH-47C	68-15849	Accident/Destroyed [OIF]	05/11/2008			
M3294	**89-00140**	CH-47D		03/07/1990	CH-47C	68-15990	Guard - IL				
M3295	**89-00141**	CH-47D		03/20/1990	CH-47C	68-15834	Accident/Destroyed [OEF]	08/05/2011			
M3296	**89-00142**	CH-47D		03/26/1990	CH-47C	67-18516	Destroyed by Enemy Action [OEF]	09/10/2012			
M3297	**89-00143**	CH-47D		03/26/1990	CH-47C	68-15829	Sold to Australia				
M3298	**89-00144**	CH-47D		03/30/1990	CH-47C	68-16008	Guard - MD/NY*				
M3299	**89-00145**	CH-47D		03/31/1990	CH-47C	70-15012	Guard - MD/NY*				

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3301	**89-00147**	CH-47D		04/26/1990	CH-47C	68-15836	Destroyed by Enemy Action [OEF]	05/12/2008			
M3302	**89-00148**	CH-47D		04/27/1990	CH-47C	68-15863	Guard - OR				
M3303	**89-00149**	CH-47D		05/08/1990	CH-47C	70-15002	Reserve - KS				
M3304	**89-00150**	CH-47D		04/30/1990	CH-47C	70-15005	Guard - CO				
M3305	**89-00151**	CH-47D		05/25/1990	CH-47C	76-22678	Guard - OH*				
M3306	**89-00152**	CH-47D		05/30/1990	CH-47C	76-22684	Guard - OR				
M3307	**89-00153**	CH-47D		05/30/1990	CH-47C	68-15862	Guard - OH*				
M3308	**89-00154**	CH-47D		06/01/1990	CH-47C	68-15822	Inducted to F Model Program		10/08/2009	10-08075	CH-47F
M3309	**89-00155**	CH-47D		06/25/1990	CH-47C	68-16011	Inducted to F Model Program		02/08/2012	12-08105	CH-47F
M3310	**89-00156**	CH-47D		07/05/1990	CH-47C	68-15860	Reserve - WA				
M3311	**89-00157**	CH-47D		06/30/1990	CH-47C	68-15852	Inducted to F Model Program		04/19/2010	10-08079	CH-47F
M3312	**89-00158**	CH-47D		06/30/1990	CH-47C	74-22279	Cat B Trainer - Ft Eustis VA				
M3313	**89-00159**	CH-47D		06/30/1990	CH-47C	67-18526	Inducted to F Model Program		03/09/2011	11-08091	
M3316	**89-00162**	CH-47D		07/30/1990	CH-47C	68-15815	Reserve - VA				
M3317	**89-00163**	CH-47D		08/03/1990	CH-47C	70-15023	Sold to Australia				
M3318	**89-00164**	CH-47D		08/21/1990	CH-47C	67-18549	Inducted to F Model Program		08/20/2010	10-08084	CH-47F
M3319	**89-00165**	CH-47D		08/28/1990	CH-47C	74-22278	Accident/Destroyed [Desert Storm]	01/11/1991			
M3320	**89-00166**	CH-47D		08/31/1990	CH-47C	67-18546	Guard - OH*				
M3321	**89-00167**	CH-47D		08/31/1990	CH-47C	67-18520	Guard - MD/NY*				
M3322	**89-00168**	CH-47D		09/06/1990	CH-47C	70-15027	Guard - MD/NY*				
M3323	**89-00169**	CH-47D		09/14/1990	CH-47C	68-16012	Guard - NV/MT*				
M3324	**89-00170**	CH-47D		09/27/1990	CH-47C	67-18503	Guard - MD/NYL*				
M3325	**89-00171**	CH-47D		09/28/1990	CH-47C	68-15821	Accident/Destroyed [OIF]	08/14/2007			
M3326	**89-00172**	CH-47D		09/29/1990	CH-47C	68-15825	Cat B Trainer - Ft Eustis VA				
M3327	**89-00173**	CH-47D		10/25/1990	CH-47C	67-18528	Accident/Destroyed [US]	10/10/1992			
M3328	**89-00174**	CH-47D		10/26/1990	CH-47C	67-18551	Guard - CA				
M3329	**89-00175**	CH-47D		10/29/1990	CH-47C	68-15848	Inducted to F Model Program		06/24/2009	09-08070	CH-47F
M3330	**89-00176**	CH-47D		10/30/1990	CH-47B	66-19138	Active - Soto Cano AB				
M3331	**89-00177**	CH-47D		10/31/1990	CH-47C	68-15819	Guard - OH*				
M3332	**90-00180**	CH-47D		11/27/1990	CH-47C	74-22286	Active - Redstone Arsenal AL				
M3333	**90-00181**	CH-47D		11/30/1990	CH-47C	74-22271	Inducted to F Model Program		02/10/2011	11-08090	CH-47F
M3334	**90-00182**	CH-47D		11/30/1990	CH-47C	74-22272	Guard - OH*				
M3335	**90-00183**	CH-47D		11/30/1990	CH-47C	68-15816	Accident/Destroyed [US]	04/20/2004			
M3336	**90-00184**	CH-47D		11/30/1990	CH-47C	68-15828	Reserve - WA				
M3337	**90-00185**	CH-47D		12/21/1990	CH-47C	70-15009	Reserve - WA				
M3338	**90-00186**	CH-47D		12/29/1990	CH-47C	67-18515	Reserve - VA				
M3339	**90-00187**	CH-47D		12/28/1990	CH-47C	70-15018	Active - Ft Rucker AL				
M3340	**90-00188**	CH-47D		01/25/1991	CH-47C	71-20955	Active - Ft Rucker AL				
M3341	**90-00189**	CH-47D		01/30/1991	CH-47C	67-18510	Reserve - WA				
M3342	**90-00190**	CH-47D		02/28/1991	CH-47C	68-15812	Active - Ft Rucker AL				
M3343	**90-00191**	CH-47D		01/31/1991	CH-47C	74-22273	Active - Soto Cano AB				
M3344	**90-00192**	CH-47D		01/31/1991	CH-47C	74-22274	Accident/Destroyed [US]	10/28/2011			
M3345	**90-00193**	CH-47D		02/28/1991	CH-47C	68-15859	Reserve - WA				
M3346	**90-00194**	CH-47D		02/28/1991	CH-47C	74-22294	Trainer - Ft Eustis VA				
M3347	**90-00195**	CH-47D		02/28/1991	CH-47C	68-15864	Accident/Destroyed [US]	05/29/2002			
M3348	**90-00196**	CH-47D		03/29/1991	CH-47C	69-17107	Reserve - KS				
M3349	**90-00197**	CH-47D		03/30/1991	CH-47C	69-17117	Guard - CA				
M3350	**90-00198**	CH-47D		07/31/1991	CH-47C	76-22682	Active - Ft Rucker AL				
M3351	**90-00199**	CH-47D		01/10/1992	CH-47C	76-22676	Inducted to F Model Program		02/08/2012	12-08104	CH-47F
M3352	**90-00200**	CH-47D		03/30/1991	CH-47C	70-15028	Destroyed by Enemy Action [OEF]	09/25/2005			
M3353	**90-00201**	CH-47D		04/30/1991	CH-47C	67-18530	Accident/Destroyed [US]	07/31/1994			
M3354	**90-00202**	CH-47D		04/11/1991	CH-47C	74-22293	Guard - TX				

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M3355	**90-00203**	CH-47D		04/24/1991	CH-47C	68-16004	Active - Ft Rucker AL					
M3356	**90-00204**	CH-47D		04/30/1991	CH-47C	74-22287	Guard - OH*					
M3357	**90-00205**	CH-47D		05/21/1991	CH-47C	69-17125	Active - Ft Rucker AL					
M3358	**90-00206**	CH-47D		06/28/1991	CH-47C	76-22683	Guard - MD					
M3359	**90-00207**	CH-47D		09/30/1991	CH-47C	70-15000	Reserve - WA					
M3360	**90-00208**	CH-47D		10/16/1991	CH-47C	69-17122	Reserve - VA					
M3361	**90-00209**	CH-47D		04/30/1991	CH-47C	68-15818	Active - Ft Rucker AL					
M3362	**90-00210**	CH-47D		12/31/1991	CH-47C	68-15853	Guard - TX					
M3363	**90-00211**	CH-47D		09/19/1991	CH-47C	70-15021	Reserve - WA					
M3364	**90-00212**	CH-47D		05/24/1991	CH-47C	68-15856	Reserve - VA					
M3365	**90-00213**	CH-47D		05/31/1991	CH-47C	79-23395	Reserve - WA					
M3366	**90-00214**	CH-47D		05/31/1991	CH-47C	68-15992	Guard - IL					
M3367	**90-00215**	CH-47D		06/28/1991	CH-47C	68-15842	Guard - NY					
M3368	**90-00216**	CH-47D		06/27/1991	CH-47C	68-16015	Guard - NY					
M3369	**90-00217**	CH-47D		06/28/1991	CH-47C	68-15998	Accident/Destroyed [OEF]	04/23/2003				
M3370	**90-00218**	CH-47D		07/18/1991	CH-47C	70-15004	Guard - OH*					
M3371	**90-00219**	CH-47D		07/31/1991	CH-47C	68-15857	Guard - OH*					
M3372	**90-00220**	CH-47D		07/31/1991	CH-47C	68-15858	Accident/Destroyed [US]	09/23/1994				
M3373	**90-00221**	CH-47D		07/31/1991	CH-47C	68-16007	Reserve - WA					
M3374	**90-00222**	CH-47D		09/12/1991	CH-47C	67-18521	Reserve - VA					
M3375	**90-00223**	CH-47D		09/19/1991	CH-47C	69-17115	Reserve - WA					
M3376	**90-00224**	CH-47D		10/02/1991	CH-47C	68-15817	Cat B Trainer - Ft Eustis VA					
M3377	**90-00225**	CH-47D		10/04/1991	CH-47C	71-20949	Reserve - VA					
M3378	**90-00226**	CH-47D		10/31/1991	CH-47C	79-23397	Guard - SC					
M3379	**91-00230**	CH-47D		10/31/1991	CH-47C	71-20953	Destroyed by Enemy Action [OIF]	11/02/2003				
M3380	**91-00231**	CH-47D		12/30/1991	CH-47C	74-22280	Active - Ft Rucker AL					
M3381	**91-00232**	CH-47D		10/31/1991	CH-47C	70-15033	Guard - NV/MT*					
M3382	**91-00233**	CH-47D		10/31/1991	CH-47C	68-16019	Guard - MD/NY*					
M3383	**91-00234**	CH-47D		11/29/1991	CH-47C	68-15814	Guard - MD					
M3384	**91-00235**	CH-47D		01/29/1991	CH-47C	67-18525	Guard - FL					
M3385	**91-00236**	CH-47D		11/29/1991	CH-47C	68-15833	Guard - OK					
M3386	**91-00237**	CH-47D		11/29/1991	CH-47C	71-20948	Reserve - WA					
M3387	**91-00238**	CH-47D		12/14/1991	CH-47C	76-22673	Active - Soto Cano AB					
M3388	**91-00239**	CH-47D		02/04/1992	CH-47C	76-22674	Accident/Destroyed [OEF]	04/22/2012				
M3389	**91-00240**	CH-47D		01/31/1992	CH-47C	67-18494	Reserve - WA					
M3390	**91-00241**	CH-47D		02/12/1992	CH-47C	74-22282	Inducted to F Model Program		01/12/2012	12-08102	CH-47F	
M3391	**91-00242**	CH-47D		02/07/1992	CH-47C	79-23399	Inducted to F Model Program		05/24/2012	12-08107	CH-47F	
M3392	**91-00243**	CH-47D		02/25/1992	CH-47C	79-23401	Guard - MD/NY*					
M3393	**91-00244**	CH-47D		02/24/1992	CH-47C	79-23400	Guard - CA					
M3394	**91-00245**	CH-47D		02/28/1992	CH-47C	76-22680	Depot - Philadelphia PA					
M3395	**91-00246**	CH-47D		02/28/1992	CH-47C	69-17110	Guard - SC					
M3396	**91-00247**	CH-47D		03/20/1992	CH-47C	67-18495	Guard - CO					
M3397	**91-00248**	CH-47D		03/31/1992	CH-47C	67-18547	Guard - WA					
M3398	**91-00249**	CH-47D		03/25/1992	CH-47C	68-16018	Guard - NV					
M3399	**91-00250**	CH-47D		03/31/1992	CH-47C	68-15811	Guard - EAATS - PA					
M3400	**91-00251**	CH-47D		04/16/1992	CH-47C	68-15844	Guard - WA					
M3401	**91-00252**	CH-47D		04/27/1992	CH-47C	70-15026	Guard - OR					
M3402	**91-00253**	CH-47D		04/28/1992	CH-47C	70-15024	Guard - EAATS - PA					
M3403	**91-00254**	CH-47D		04/30/1992	CH-47C	70-15032	Guard - EAATS - PA					
M3404	**91-00255**	CH-47D		05/27/1992	CH-47C	74-22284	Guard - NV/MT*					
M3405	**91-00256**	CH-47D		05/30/1992	CH-47C	69-17101	Guard - OR					
M3406	**91-00257**	CH-47D		05/29/1992	CH-47C	74-22291	Guard - NY					

Appendix A - H-47 Serial Number Database as of 01 November 2012

Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M3407	**91-00258**	CH-47D		05/30/1992	CH-47C	70-15020	Guard - NY					
M3408	**91-00259**	CH-47D		06/29/1992	CH-47C	69-17103	Reserve - KS					
M3409	**91-00260**	CH-47D		06/29/1992	CH-47A	61-02416	Guard - CA					
M3410	**91-00261**	CH-47D		09/04/1992	CH-47A	61-02409	Guard - WA					
M3411	**91-00262**	CH-47D		09/09/1992	CH-47C	70-15003	Guard - OR					
M3412	**91-00263**	CH-47D		09/04/1992	CH-47A	62-02114	Guard - NY					
M3413	**91-00264**	CH-47D		09/04/1992	CH-47A	61-02420	Inducted to F Model Program		02/08/2012	12-08103	CH-47F	
M3414	**91-00265**	CH-47D		09/21/1992	CH-47A	61-02410	Guard - IA					
M3415	**91-00266**	CH-47D		09/23/1992	CH-47A	61-02415	Reserve - KS					
M3416	**91-00267**	CH-47D		10/07/1992	CH-47A	61-02417	Accident/Destroyed [OIF]	09/18/2008				
M3417	**91-00268**	CH-47D		10/14/1992	CH-47A	61-02419	Guard - IA					
M3418	**91-00269**	CH-47D		10/22/1992	CH-47A	61-02421	Destroyed by Enemy Action [OEF]	12/04/2005				
M3419	**91-00270**	CH-47D		12/15/1992	CH-47A	61-02423	Guard - NE					
M3420	**91-00271**	CH-47D		12/15/1992	CH-47C	67-18540	Guard - CO					
M3421	**92-00280**	CH-47D		12/18/1992	CH-47A	62-02115	Guard - CO					
M3422	**92-00281**	CH-47D		12/15/1992	CH-47C	85-24736	Guard - WA					
M3423	**92-00282**	CH-47D		01/23/1993	CH-47A	62-02116	Guard - NV					
M3424	**92-00283**	CH-47D		01/23/1993	CH-47C	85-24740	Guard - IA					
M3425	**92-00284**	CH-47D		03/15/1993	CH-47C	67-18548	Guard - OR					
M3426	**92-00285**	CH-47D		03/15/1993	CH-47C	85-24741	Guard - IL*					
M3427	**92-00286**	CH-47D		06/30/1993	CH-47A	62-02130	Guard - CO					
M3428	**92-00287**	CH-47D		06/30/1993	CH-47A	62-02131	Guard - NE					
M3429	**92-00288**	CH-47D		06/30/1993	CH-47C	85-24739	Guard - NE					
M3430	**92-00289**	CH-47D		06/30/1993	CH-47A	63-07905	Guard - TX					
M3431	**92-00290**	CH-47D		06/30/1993	CH-47A	63-07908	Guard -TX					
M3432	**92-00291**	CH-47D		06/30/1993	CH-47C	85-24735	Inducted to F Model Program		05/02/2011	11-08093	CH-47F	
M3433	**92-00292**	CH-47D		06/25/1993	CH-47A	63-07916	Guard - CA					
M3434	**92-00293**	CH-47D		06/30/1993	CH-47A	62-02127	Guard - CO					
M3435	**92-00294**	CH-47D		08/26/1993	CH-47C	85-24742	Reserve -WA					
M3436	**92-00295**	CH-47D		09/16/1993	CH-47A	63-07912	Accident/Destroyed [OEF]	08/26/2012				
M3437	**92-00296**	CH-47D		09/08/1993	CH-47A	62-02128	Reserve - WA					
M3438	**92-00297**	CH-47D		09/07/1993	CH-47C	85-24744	Guard - TX					
M3439	**92-00298**	CH-47D		09/10/1993	CH-47A	63-07915	Guard - SC					
M3440	**92-00299**	CH-47D		09/14/1993	CH-47A	61-02413	Guard - FL					
M3441	**92-00300**	CH-47D		11/05/1993	CH-47C	85-24737	Guard - MN					
M3442	**92-00301**	CH-47D		10/25/1993	CH-47A	61-02412	Accident/Destroyed [OIF]	04/14/2004				
M3443	**92-00302**	CH-47D		10/25/1993	CH-47A	62-02123	Guard - OH*					
M3444	**92-00303**	CH-47D		11/05/1993	YCH-47D	76-18538	Guard - OK					
M3445	**92-00304**	CH-47D		11/12/1993	YCH-47D	76-08008	Guard - MN					
M3446	**92-00305**	CH-47D		12/09/1993	CH-47A	63-07900	Guard - IA					
M3447	**92-00306**	CH-47D		12/23/1993	CH-47C	85-24738	Accident/Destroyed [OEF]	06/25/2011				
M3448	**92-00307**	CH-47D		01/12/1994	CH-47A	62-02119	Guard - OK					
M3449	**92-00308**	CH-47D		01/12/1994	CH-47A	62-02124	Reserve - KS					
M3450	**92-00309**	CH-47D		02/28/1994	CH-47A	60-03449	Guard - NV/MT*					
M4301	**92-00367**	CH-47D		02/28/1994	NB-1		Inducted to F Model Program		12/17/2007	08-08043	CH-47F	
M4302	**92-00368**	CH-47D		03/15/1994	NB-2		Guard - SC					
M3455	**93-00928**	CH-47D		05/31/1995	CH-47C	A15-0005	Guard - WA					
M3456	**93-00929**	CH-47D		06/30/1995	CH-47C	A15-0007	Guard - NV/MT*					
M3457	**93-00930**	CH-47D		07/31/1995	CH-47C	A15-0008	Guard - SC					
M3458	**93-00931**	CH-47D		09/13/1995	CH-47C	A15-0009	Guard - OH*					
M3459	**93-00932**	CH-47D		10/13/1995	CH-47C	A15-0010	Guard - NV/MT*					
M3460	**93-00933**	CH-47D		11/29/1995	CH-47C	A15-0011	Guard - WA					

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3461	**93-00934**	CH-47D		12/22/1995	CH-47C	A15-0012	Guard - NV/MT*				
	98-00200	CH-47D		06/26/2002	NB-3		Reserve - VA				
M8001	**98-00011**	YCH-47F		12/17/2002	CH-47D	83-24107	Inducted to F Model Program		10/08/2008	09-08059	CH-47F
M8002	**98-00012**	YCH-47F		05/07/2002	CH-47D	83-24115	Inducted to F Model Program		08/05/2009	09-08073	CH-47F
M8003	**03-08003**	YCH-47F		07/21/2004	CH-47D	83-24121	Inducted to F Program/Trans to RAF-On Display RAF Odiham		11/10/2010	10-08087	CH-47F
M8701	**04-08701**	CH-47F		11/30/2006	NB-01		Active - Redstone Arsenal AL				
M8702	**04-08702**	CH-47F		12/20/2006	NB-02		Active - Ft Rucker AL				
M8703	**04-08703**	CH-47F		01/11/2007	NB-03		Active - Ft Campbell KY				
M8704	**04-08704**	CH-47F		02/21/2007	NB-04		Active - Ft Campbell KY				
M8705	**04-08705**	CH-47F		02/16/2007	NB-05		Active - Ft Campbell KY				
M8706	**04-08706**	CH-47F		02/28/2007	NB-06		Active - Wheeler AFB HI*				
M8707	**04-08707**	CH-47F		03/09/2007	NB-07		Active - Ft Campbell KY				
M8708	**04-08708**	CH-47F		06/29/2007	NB-08		Active - Ft Bragg NC				
M8709	**04-08709**	CH-47F		08/27/2007	NB-09		Active - Ft Hood TX				
M8710	**04-08710**	CH-47F		10/26/2007	NB-10		Active - Wheeler AFB HI*				
M8711	**04-08711**	CH-47F		11/07/2007	NB-11		Active - Ft Rucker AL				
M8712	**04-08712**	CH-47F		11/26/2007	NB-12		Active - Ft Rucker AL				
M8713	**04-08713**	CH-47F		01/24/2008	NB-13		Active - Katterbach*				
M8714	**04-08714**	CH-47F		02/27/2008	NB-14		Active - Ft Bragg NC*				
M8715	**04-08715**	CH-47F		04/30/2008	NB-15		Active - Ft Hood TX				
M8716	**04-08716**	CH-47F		05/29/2008	NB-16		Active - Katterbach*				
M8717	**04-08717**	CH-47F		08/27/2008	NB-17		Active - Ft Drum NY				
M8010	**05-08010**	CH-47F		11/17/2006	MH-47D	83-24118	Active - Wheeler AFB HI*				
M8011	**05-08011**	CH-47F		12/13/2006	CH-47D	85-24367	Active - Wheeler AFB HI*				
M8012	**05-08012**	CH-47F		12/29/2006	MH-47D	86-01635	Destroyed by Enemy Action [OEF]	01/17/2009			
M8013	**05-08013**	CH-47F		01/31/2007	CH-47D	83-24104	Active - Ft Campbell KY				
M8014	**05-08014**	CH-47F		04/09/2007	MH-47D	82-23763	Active - Ft Drum NY				
M8015	**05-08015**	CH-47F		04/09/2007	CH-47D	82-23775	Active - Ft Campbell KY				
M8016	**05-08016**	CH-47F		04/20/2007	CH-47D	82-23777	Active - Ft Bragg NC*				
M8017	**05-08017**	CH-47F		04/27/2007	CH-47D	85-24322	Active - Redstone Arsenal AL				
M8018	**06-08018**	CH-47F		05/25/2007	CH-47D	85-24344	Active - Ft Hood TX				
M8019	**06-08019**	CH-47F		05/30/2007	CH-47D	84-24169	Active - Ft Bliss TX				
M8020	**06-08020**	CH-47F		06/18/2007	CH-47D	83-24119	Active - Ft Bragg NC				
M8021	**06-08021**	CH-47F		07/29/2007	CH-47D	81-23382	Active - Ft Hood TX				
M8022	**06-08022**	CH-47F		07/20/2007	CH-47D	83-24105	Active - Ft Hood TX				
M8023	**06-08023**	CH-47F		07/31/2007	CH-47D	86-01640	Active - Ft Bliss TX				
M8024	**06-08024**	CH-47F		08/30/2007	CH-47D	81-23389	Active - Ft Hood TX				
M8025	**06-08025**	CH-47F		09/29/2007	CH-47D	85-24366	Active - Ft Drum NY				
M8026	**06-08026**	CH-47F		09/29/2007	CH-47D	81-23383	Active - Ft Bragg NC*				
M8027	**06-08027**	CH-47F		10/30/2007	CH-47D	83-24125	Active - Ft BlissTX				
M8028	**06-08028**	CH-47F		10/31/2007	CH-47D	84-24164	Active - Ft Campbell KY				
M8029	**06-08029**	CH-47F		11/21/2007	CH-47D	81-23384	Active - Ft Rucker AL				
M8030	**06-08030**	CH-47F		11/30/2007	CH-47D	85-24363	Active - Katterbach*				
M8031	**06-08031**	CH-47F		12/14/2007	CH-47D	85-24173	Active - Katterbach*				
M8032	**06-08032**	CH-47F		12/28/2007	CH-47D	83-24103	Active - Ft Drum NY				
M8718	**06-08718**	CH-47F		09/26/2008	NB-18		Active - Ft Drum NY				
M8719	**06-08719**	CH-47F		08/29/2008	NB-19		Active - Ft Campbell KY				
M8720	**06-08720**	CH-47F		09/30/2008	NB-20		Active - Ft Campbell KY				
M8033	**07-08033**	CH-47F		02/06/2008	CH-47D	83-24111	Active - Ft Drum NY				
M8034	**07-08034**	CH-47F		03/03/2008	CH-47D	84-24184	Active - Ft Bliss TX				
M8035	**07-08035**	CH-47F		03/24/2008	CH-47D	82-23769	Active - Ft Bragg NC*				
M8036	**07-08036**	CH-47F		03/31/2008	CH-47D	83-24120	Active - Katterbach*				

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M8037	**07-08037**	CH-47F		05/07/2008	CH-47D	83-24113	Active - Ft Bliss TX					
M8038	**07-08038**	CH-47F		06/11/2008	CH-47D	82-23776	Active - Ft Bragg NC*					
M8039	**07-08039**	CH-47F		06/24/2008	CH-47D	82-23771	Active - Wheeler AFB HI*					
M8040	**07-08040**	CH-47F		06/30/2008	CH-47D	83-24114	Active - Ft Bragg NC*					
M8041	**07-08041**	CH-47F		07/31/2008	CH-47D	84-24186	Accident/Destroyed (OEF)	08/18/2010				
M8721	**07-08721**	CH-47F		11/13/2008	NB-21		Active - Ft Campbell KY					
M8722	**07-08722**	CH-47F		11/13/2008	NB-22		Active - Ft Campbell KY					
M8723	**07-08723**	CH-47F		12/12/2008	NB-23		Active - Ft Campbell KY					
M8724	**07-08724**	CH-47F		12/13/2008	NB-24		Active - Ft Bliss TX					
M8725	**07-08725**	CH-47F		06/24/2009	NB-25		Active - Ft Bliss TX					
M8726	**07-08726**	CH-47F		07/31/2009	NB-26		Active - Ft Rucker AL					
M8727	**07-08727**	CH-47F		08/31/2009	NB-27		Active - Ft Bragg NC*					
M8728	**07-08728**	CH-47F		10/08/2009	NB-28		Active - Ft Bragg NC*					
M8729	**07-08729**	CH-47F		10/15/2009	NB-29		Active - Ft Drum NY					
M8730	**07-08730**	CH-47F		12/01/2009	NB-30		Active - Ft Bragg NC*					
M8731	**07-08731**	CH-47F		12/29/2009	NB-31		Accident/Destroyed (OEF)	08/08/2011				
M8732	**07-08732**	CH-47F		02/05/2010	NB-32		Active - Ft Rucker AL					
M8733	**07-08733**	CH-47F		03/05/2010	NB-33		Active - Ft Rucker AL					
M8734	**07-08734**	CH-47F		04/07/2010	NB-34		Active - Ft Rucker AL					
M8735	**07-08735**	CH-47F		04/23/2010	NB-35		Guard- Wheeler AFB HI					
M8736	**07-08736**	CH-47F		05/05/2010	NB-36		Guard - Wheeler AFB HI					
M8737	**07-08737**	CH-47F		05/18/2010	NB-37		Guard - Indiantown Gap PA					
M8738	**07-08738**	CH-47F		06/21/2010	NB-38		Guard - Wheeler AFB HI					
M8739	**07-08739**	CH-47F		06/30/2010	NB-39		Accident/Destroyed (OEF)	01/22/2012				
M8740	**07-08740**	CH-47F		07/24/2010	NB-40		Active - Wheeler AFB HI*					
M8741	**07-08741**	CH-47F		07/31/2010	NB-41		Active - Wheeler AFB HI*					
M8742	**07-08742**	CH-47F		08/21/2010	NB-42		Active - Wheeler AFB HI*					
M8743	**07-08743**	CH-47F		09/02/2010	NB-43		Guard- Wheeler AFB HI					
M8744	**07-08744**	CH-47F		09/30/2010	NB-44		Active - Katterbach*					
M8745	**07-08745**	CH-47F		11/03/2010	NB-45		Active - Katterbach*					
M8746	**07-08746**	CH-47F		11/03/2010	NB-46		Active - Katterbach*					
M8747	**07-08747**	CH-47F		12/16/2010	NB-47		Active - Katterbach*					
M8748	**07-08748**	CH-47F		11/24/2010	NB-48		Active - Katterbach*					
M8042	**08-08042**	CH-47F		01/13/2009	CH-47D	83-24122	Accident/Destroyed [OEF]	10/14/2009				
M8043	**08-08043**	CH-47F		01/31/2008	CH-47D	92-00367	Active - Wheeler AFB HI*					
M8044	**08-08044**	CH-47F		02/26/2009	CH-47D	84-24155	Destroyed by Enemy Action [OEF]	07/24/2011				
M8045	**08-08045**	CH-47F		02/28/2009	CH-47D	84-24185	Active - Ft Bliss TX					
M8046	**08-08046**	CH-47F		03/27/2009	CH-47D	86-01648	Active - Ft Hood TX					
M8047	**08-08047**	CH-47F		03/31/2009	CH-47D	85-24328	Active - Ft Bliss TX					
M8048	**08-08048**	CH-47F		04/24/2009	CH-47D	87-01675	Accident/Destroyed [OEF]	07/25/2010				
M8049	**08-08049**	CH-47F		04/29/2009	CH-47D	86-01652	Active - Ft Bliss TX					
M8050	**08-08050**	CH-47F		04/30/2009	CH-47D	86-01657	Active - Wheeler AFB HI*					
M8051	**08-08051**	CH-47F		05/30/2009	CH-47D	84-24163	Active - Wheeler AFB HI*					
M8052	**08-08052**	CH-47F		05/30/2009	CH-47D	87-00087	Active - Ft Drum NY					
M8053	**08-08053**	CH-47F		07/30/2009	CH-47D	84-24165	Active - Ft Campbell KY					
M8054	**08-08054**	CH-47F		07/29/2009	CH-47D	87-00081	Active - Hunter AAF GA					
M8055	**08-08055**	CH-47F		07/31/2009	CH-47D	86-01655	Active - Ft Drum NY					
M8056	**08-08056**	CH-47F		08/28/2009	CH-47D	86-01658	Active - Ft Drum NY					
M8057	**08-08057**	CH-47F		08/22/2009	CH-47D	86-01675	Active - Ft Hood TX					
M8058	**08-08058**	CH-47F		09/21/2009	CH-47D	83-24109	Active - Ft Drum NY					
M8749	**08-08749**	CH-47F		12/08/2010	NB-49		Depot - Corpus Christi TX					
M8750	**08-08750**	CH-47F		12/23/2010	NB-50		Active - Katterbach*					

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M8751	**08-08751**	CH-47F		12/17/2010	NB-51		Active - Ft Bliss TX					
M8752	**08-08752**	CH-47F		01/27/2011	NB-52		Guard - Indiantown Gap PA					
M8753	**08-08753**	CH-47F		02/12/2011	NB-53		Active - Hunter AAF GA					
M8754	**08-08754**	CH-47F		02/12/2011	NB-54		Guard - Indiantown Gap PA					
M8755	**08-08755**	CH-47F		02/28/2011	NB-55		Active - Ft Rucker AL					
M8757	**08-08756**	CH-47F		03/22/2011	NB-56		Active - Ft Rucker AL					
M8756	**08-08757**	CH-47F		03/18/2011	NB-57		Active - Ft Rucker AL					
M8758	**08-08758**	CH-47F		03/30/2011	NB-58		Active - Ft Bragg NC*					
M8759	**08-08759**	CH-47F		04/12/2011	NB-59		Guard - Indiantown Gap PA					
M8760	**08-08760**	CH-47F		04/07/2011	NB-60		Guard - Indiantown Gap PA					
M8761	**08-08761**	CH-47F		04/29/2011	NB-61		Guard - Indiantown Gap PA					
M8762	**08-08762**	CH-47F		04/19/2011	NB-62		Guard - Indiantown Gap PA					
M8763	**08-08763**	CH-47F		05/25/2011	NB-63		Guard - Indiantown Gap PA					
M8764	**08-08764**	CH-47F		05/20/2011	NB-64		Active - Ft Wainwright AK					
M8765	**08-08765**	CH-47F		06/13/2011	NB-65		Guard - Wheeler AFB HI					
M8766	**08-08766**	CH-47F		06/21/2011	NB-66		Guard - Wheeler AFB HI					
M8767	**08-08767**	CH-47F		06/28/2011	NB-67		Guard - Wheeler AFB HI					
M8768	**08-08768**	CH-47F		07/31/2011	NB-68		Guard - Windsor Locks CT					
M8769	**08-08769**	CH-47F		07/26/2011	NB-69		Guard - Windsor Locks CT					
M8770	**08-08770**	CH-47F		07/30/2011	NB-70		Guard - Windsor Locks CT					
M8771	**08-08771**	CH-47F		08/31/2011	NB-71		Active - Ft Wainwright AK					
M8772	**08-08772**	CH-47F		09/21/2011	NB-72		Active - Ft Wainwright AK					
M8773	**08-08773**	CH-47F		10/03/2011	NB-73		Active - Ft Wainwright AK					
M8774	**08-08774**	CH-47F		09/29/2011	NB-74		Active - Ft Wainwright AK					
M8775	**08-08775**	CH-47F		10/04/2011	NB-75		Active - Ft Wainwright AK					
M8776	**08-08776**	CH-47F		10/27/2011	NB-76		Active - Ft Wainwright AK					
M8777	**08-08777**	CH-47F		10/29/2011	NB-77		Active - Ft Wainwright AK					
M8059	**09-08059**	CH-47F		02/17/2010	YCH-47F	98-00011	Active - Ft Bragg NC*					
M8060	**09-08060**	CH-47F		02/12/2010	CH-47D	85-24843	Active - Ft Bragg NC*					
M8061	**09-08061**	CH-47F		03/08/2010	CH-47D	88-00078	Active - Ft Rucker AL					
M8062	**09-08062**	CH-47F		04/08/2010	CH-47D	85-24339	Active - Ft Rucker AL					
M8063	**09-08063**	CH-47F		04/27/2010	CH-47D	82-23765	Active - Redstone Arsenal AL					
M8064	**09-08064**	CH-47F		05/12/2010	CH-47D	86-01649	Guard - Wheeler AFB HI					
M8065	**09-08065**	CH-47F		06/10/2010	CH-47D	84-24153	Guard - Wheeler AFB HI					
M8066	**09-08066**	CH-47F		07/08/2010	CH-47D	84-24182	Active - Wheeler AFB HI*					
M8067	**09-08067**	CH-47F		08/02/2010	CH-47D	85-24333	Active - Wheeler AFB HI*					
M8068	**09-08068**	CH-47F		09/02/2010	CH-47D	85-24350	Active - Wheeler AFB HI*					
M8069	**09-08069**	CH-47F		09/15/2010	CH-47D	88-00074	Guard - Wheeler AFB HI					
M8070	**09-08070**	CH-47F		10/01/2010	CH-47D	89-00175	Active - Katterbach*					
M8071	**09-08071**	CH-47F		10/13/2010	CH-47D	85-24330	Active - Katterbach*					
M8072	**09-08072**	CH-47F		10/29/2010	CH-47D	85-24369	Active - Ft Bliss TX					
M8073	**09-08073**	CH-47F		12/13/2010	YCH-47F	98-00012	Active - Ft Bliss TX					
M8778	**09-08778**	CH-47F		10/31/2011	NB-78		Active - Ft Wainwright AK					
M8779	**09-08779**	CH-47F		12/02/2011	NB-79		Guard - Birmingham AL					
M8780	**09-08780**	CH-47F		12/14/2011	NB-80		Guard - Savannah GA					
M8781	**09-08781**	CH-47F		12/23/2011	NB-81		Guard - Savannah GA					
M8782	**09-08782**	CH-47F		12/27/2011	NB-82		Active - Hunter AAF GA					
M8783	**09-08783**	CH-47F		12/29/2011	NB-83		Active - Hunter AAF GA					
M8784	**09-08784**	CH-47F		01/25/2012	NB-84		Active - Hunter AAF GA					
M8785	**09-08785**	CH-47F		01/31/2012	NB-85		Active - Hunter AAF GA					
M8786	**09-08786**	CH-47F		02/03/2012	NB-86		Active - Hunter AAF GA					
M8787	**09-08787**	CH-47F		03/06/2012	NB-87		Guard - Savannah GA					

Appendix A - H-47 Serial Number Database as of 01 November 2012

Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M8788	**09-08788**	CH-47F		02/27/2012	NB-88		Active - Hunter AAF GA					
M8789	**09-08789**	CH-47F		03/10/2012	NB-89		Guard - Birmingham AL					
M8790	**09-08790**	CH-47F		03/19/2012	NB-90		Active - Hunter AAF GA					
M8791	**09-08791**	CH-47F		03/15/2012	NB-91		Active - Hunter AAF GA					
M8792	**09-08792**	CH-47F		04/07/2012	NB-92		Active - Ft Campbell KY					
M8793	**09-08793**	CH-47F		03/29/2012	NB-93		Active - Ft Campbell KY					
M8794	**09-08794**	CH-47F		03/30/2012	NB-94		Active - Ft Campbell KY					
M8795	**09-08795**	CH-47F		04/12/2012	NB-95		Active - Ft Drum NY					
M8796	**09-08796**	CH-47F		04/23/2012	NB-96		Active - Ft Rucker AL					
M8797	**09-08797**	CH-47F		05/14/2012	NB-97		Active					
M8798	**09-08798**	CH-47F		04/30/2012	NB-98		Guard - Savannah GA					
M8799	**09-08799**	CH-47F		05/11/2012	NB-99		Guard - Savannah GA					
M8800	**09-08800**	CH-47F		05/23/2012	NB-100		Guard - Birmingham AL					
M8822	**09-08822**	CH-47F		10/19/2012	NB-122		Guard - NE					
M8823	**09-08823**	CH-47F			NB-123		In Production					
M8824	**09-08824**	CH-47F			NB-124		In Production					
M8825	**09-08825**	CH-47F			NB-125		In Production					
M8826	**09-08826**	CH-47F			NB-126		In Production					
M8827	**09-08827**	CH-47F			NB-127		In Production					
M8828	**09-08828**	CH-47F			NB-128		In Production					
M8829	**09-08829**	CH-47F			NB-129		In Production					
M8074	**10-08074**	CH-47F		02/10/2011	CH-47D	89-00164	Active - Ft Rucker AL					
M8075	**10-08075**	CH-47F		03/30/2011	CH-47D	86-01669	Active - Ft Bragg NC*					
M8076	**10-08076**	CH-47F		05/18/2011	CH-47D	85-24331	Guard - Indiantown Gap PA					
M8077	**10-08077**	CH-47F		06/10/2011	CH-47D	87-00083	Active - Hunter AAF GA					
M8078	**10-08078**	CH-47F		06/27/2011	CH-47D	86-01661	Guard - Winsor Locks CT					
M8079	**10-08079**	CH-47F		07/01/2011	CH-47D	89-00157	Guard - Winsor Locks CT					
M8080	**10-08080**	CH-47F		07/21/2011	CH-47D	84-24176	Guard - Winsor Locks CT					
M8081	**10-08081**	CH-47F		08/23/2011	CH-47D	87-00085	Guard - Birmingham AL					
M8082	**10-08082**	CH-47F		09/10/2011	CH-47D	85-24353	Active - Ft Wainwright AK					
M8083	**10-08083**	CH-47F		09/28/2011	CH-47D	85-24323	Active - Ft Wainwright AK					
M8084	**10-08084**	CH-47F		11/16/2011	CH-47D	89-00164	Active - Ft Wainwright AK					
M8085	**10-08085**	CH-47F		11/23/2011	CH-47D	89-00154	Guard - Savannah GA					
M8086	**10-08086**	CH-47F		12/09/2011	CH-47D	86-01662	Active					
M8087	**10-08087**	CH-47F		12/09/2011	YCH-47F	03-08003	Guard - Birmingham AL					
M8801	**10-08801**	CH-47F		05/31/2012	NB-101		Active - Ft Riley KS					
M8802	**10-08802**	CH-47F		05/31/2012	NB-102		Active - Ft Riley KS					
M8803	**10-08803**	CH-47F		07/11/2012	NB-103		Active - Ft Riley KS					
M8804	**10-08804**	CH-47F		06/29/2012	NB-104		Active - Ft Riley KS					
M8805	**10-08805**	CH-47F		06/28/2012	NB-105		Active - Ft Riley KS					
M8806	**10-08806**	CH-47F		06/26/2012	NB-106		Active - Ft Riley KS					
M8807	**10-08807**	CH-47F		07/10/2012	NB-107		Active - Ft Riley KS					
M8808	**10-08808**	CH-47F		07/18/2012	NB-108		Active - Ft Riley KS					
M8809	**10-08809**	CH-47F		07/24/2012	NB-109		Sold to United Arab Emirates					
M8809	**10-08810**	CH-47F		08/21/2012	NB-110		Sold to United Arab Emirates					
M8811	**10-08811**	CH-47F		08/02/2012	NB-111		Guard - IA/MN					
M8812	**10-08812**	CH-47F		08/15/2012	NB-112		Guard - IA/MN					
M8813	**10-08813**	CH-47F		08/21/2012	NB-113		Guard - IA/MN					
M8814	**10-08814**	CH-47F		08/23/2012	NB-114		Guard - IA/MN					
M8815	**10-08815**	CH-47F		08/29/2012	NB-115		Guard - IA/MN					
M8816	**10-08816**	CH-47F		09/20/2012	NB-116		Guard - IA/MN					
M8817	**10-08817**	CH-47F		09/17/2012	NB-117		Guard - IA/MN					

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M8818	**10-08818**	CH-47F		09/20/2012	NB-118		Guard - IA/MN					
M8819	**10-08819**	CH-47F		09/27/2012	NB-119		Guard - NE/CO					
M8820	**10-08820**	CH-47F		10/12/2012	NB-120		Guard - NE/CO					
M8821	**10-08821**	CH-47F		10/19/2012	NB-121		Guard - NE/CO					
M8088	**11-08088**	CH-47F		01/25/2012	CH-47D	86-01671	Active - Hunter AAF GA					
M8089	**11-08089**	CH-47F		02/29/2012	CH-47D	86-01677	Active - Hunter AAF GA					
M8090	**11-08090**	CH-47F		03/24/2012	CH-47D	90-00181	Active					
M8091	**11-08091**	CH-47F		04/30/2012	CH-47D	89-00159	Active - Ft Rucker AL					
M8092	**11-08092**	CH-47F		05/31/2012	CH-47D	84-24179	Active - Ft Riley KS					
M8093	**11-08093**	CH-47F		06/29/2012	CH-47D	92-00291	Active - Ft Riley KS					
M8094	**11-08094**	CH-47F		07/18/2012	CH-47D	88-00076	Active - Ft Riley KS					
M8095	**11-08095**	CH-47F		08/15/2012	CH-47D	88-00101	Guard - IA/MN					
M8096	**11-08096**	CH-47F		09/28/2012	CH-47D	87-00082	Guard - IA/MN					
M8097	**11-08097**	CH-47F		10/10/2012	CH-47D	86-01656	Guard - NE/CO					
M8098	**11-08098**	CH-47F			CH-47D	86-01673	In Production					
M8830	**11-08830**	CH-47F			NB-130		In Production					
M8831	**11-08831**	CH-47F			NB-131		In Production					
M8832	**11-08832**	CH-47F			NB-132		In Production					
M8833	**11-08833**	CH-47F			NB-133		In Production					
M8834	**11-08834**	CH-47F			NB-134		In Production					
M8835	**11-08835**	CH-47F			NB-135		In Production					
M8836	**11-08836**	CH-47F			NB-136		In Production					
M8837	**11-08837**	CH-47F			NB-137		In Production					
M8838	**11-08838**	CH-47F			NB-138		In Production					
M8839	**11-08839**	CH-47F			NB-139		In Production					
M8840	**11-08840**	CH-47F			NB-140		In Production					
M8841	**11-08841**	CH-47F			NB-141		In Production					
M8842	**11-08842**	CH-47F			NB-142		In Production					
M8843	**11-08843**	CH-47F			NB-143		In Production					
M8844	**11-08844**	CH-47F			NB-144		Lot 10					
M8845	**11-08845**	CH-47F			NB-145		Lot 10					
M8846	**11-08846**	CH-47F			NB-146		Lot 10					
M8847	**11-08847**	CH-47F			NB-147		Lot 10					
M8848	**11-08848**	CH-47F			NB-148		Lot 10					
M8849	**11-08849**	CH-47F			NB-149		Lot 10					
M8850	**11-08850**	CH-47F			NB-150		Lot 10					
M8851	**11-08851**	CH-47F			NB-151		Lot 10					
M8852	**11-08852**	CH-47F			NB-152		Lot 10					
M8853	**11-08853**	CH-47F			NB-153		Lot 10					
M8855	**09-08855**	CH-47F			NB-155		Lot 10					
M8856	**09-08856**	CH-47F			NB-156		Lot 10					
M8854	**11-08854**	CH-47F			NB-154		Lot 10					
M8099	**12-08099**	CH-47F			CH-47D	86-01672	In Production					
M8100	**12-08100**	CH-47F			CH-47D	85-24347	In Production					
M8101	**12-08101**	CH-47F			CH-47D	86-01667	In Production					
M8102	**12-08102**	CH-47F			CH-47D	91-00241	In Production					
M8103	**12-08103**	CH-47F			CH-47D	91-00264	In Production					
M8104	**12-08104**	CH-47F			CH-47D	90-00199	In Production					
M8105	**12-08105**	CH-47F			CH-47D	89-00155	In Production					
M8106	**12-08106**	CH-47F			CH-47D	85-24327	In Production					
M8107	**12-08107**	CH-47F			CH-47D	91-00242	In Production					
M8108	**12-08108**	CH-47F			CH-47D	87-00112	In Production					

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Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M8109	**12-08109**	CH-47F			CH-47D	87-00096	In Production					
M8110	**12-08110**	CH-47F			CH-47D	84-24178	Lot 10					
M8111	**12-08111**	CH-47F			CH-47D	84-24167	Lot 10					
M8112	**12-08112**	CH-47F			CH-47D		Lot 10					
M8113	**12-08113**	CH-47F			CH-47D		Lot 10					
M8857	**12-08857**	CH-47F			NB-157		Lot 11					
M8858	**12-08858**	CH-47F			NB-158		Lot 11					
M8859	**12-08859**	CH-47F			NB-159		Lot 11					
M8860	**12-08860**	CH-47F			NB-160		Lot 11					
M8861	**12-08861**	CH-47F			NB-161		Lot 11					
M8862	**12-08862**	CH-47F			NB-162		Lot 11					
M8863	**12-08863**	CH-47F			NB-163		Lot 11					
M8864	**12-08864**	CH-47F			NB-164		Lot 11					
M8865	**12-08865**	CH-47F			NB-165		Lot 11					
M8866	**12-08866**	CH-47F			NB-166		Lot 11					
M8867	**12-08867**	CH-47F			NB-167		Lot 11					
M8868	**12-08868**	CH-47F			NB-168		Lot 11					
M8869	**12-08869**	CH-47F			NB-169		Lot 11					
M8874	**12-08874**	CH-47F			NB-170		Lot 11					
M8875	**12-08875**	CH-47F			NB-171		Lot 11					
M8876	**12-08876**	CH-47F			NB-172		Lot 11					
M8877	**12-08877**	CH-47F			NB-173		Lot 11					
M8878	**12-08878**	CH-47F			NB-174		Lot 11					
M8879	**12-08879**	CH-47F			NB-175		Lot 11					
M8880	**12-08880**	CH-47F			NB-176		Lot 11					
M8881	**12-08881**	CH-47F			NB-177		Lot 11					
M8882	**12-08882**	CH-47F			NB-178		Lot 11					
M8883	**12-08883**	CH-47F			NB-179		Lot 11					
M8884	**12-08884**	CH-47F			NB-180		Lot 11					
M8885	**12-08885**	CH-47F			NB-181		Lot 11					
M8886	**12-08886**	CH-47F			NB-182		Lot 11					
M8887	**12-08887**	CH-47F			NB-183		Lot 11					
M8888	**12-08888**	CH-47F			NB-184		Lot 11					
M8400	**12-08400**	CH-47F			NB-185		Lot 11					
M8401	**12-08401**	CH-47F			NB-186		Lot 11					
M3014	**82-23763**	MH-47D		05/26/1983	CH-47A	66-19049	Inducted to F Model Program		09/06/2005	05-08014	CH-47F	
M3040	**83-24110**	MH-47D		07/13/1984	CH-47A	64-13111	Accident/Destroyed [Panama]	06/12/1990				
M3048	**83-24118**	MH-47D		10/31/1984	CH-47C	70-15010	Inducted to F Model Program		05/03/2005	05-08010	CH-47F	
M3112	**85-24342**	MH-47D		04/30/1986	CH-47A	66-19071	Converted to G Model		12/22/2004	06-03765	MH-47G	
M3130	**85-24360**	MH-47D		09/02/1986	CH-47A	66-19018	Converted to G Model		05/03/2005	06-03768	MH-47G	
M3131	**85-24361**	MH-47D		08/30/1986	CH-47C	68-16021	Converted to G Model		11/08/2006	06-03767	MH-47G	
M3137	**85-24367**	MH-47D		10/17/1986	CH-47A	65-08010	Inducted to F Model Program		06/15/2005	05-08011	CH-47F	
M3140	**86-01635**	MH-47D		10/31/1986	CH-47A	64-13137	Inducted to F Model Program		06/24/2005	05-08012	CH-47F	
M3285	**89-00131**	MH-47D		01/17/1990	CH-47C	69-17106	Converted to G Model		01/24/2007	06-03766	MH-47G	
M3300	**89-00146**	MH-47D		04/26/1990	CH-47C	70-15031	Destroyed by Enemy Action [OEF]	06/25/2005				
M3314	**89-00160**	MH-47D		07/27/1990	CH-47C	67-18500	Accident/Destroyed [OEF]	10/07/2005				
M3315	**89-00161**	MH-47D		07/31/1990	CH-47C	67-18532	Converted to G Model		03/06/2006	06-03764	MH-47G	
M3258	**88-00267**	MH-47E		05/10/1991	CH-47C	68-15838	Converted to G Model		09/19/2007	07-03771	MH-47G	
M3701	**90-00414**	MH-47E		01/08/1994	CH-47C	68-16003	Converted to G Model		03/13/2009	09-03784	MH-47G	
M3702	**91-00496**	MH-47E		09/14/1993	CH-47C	76-22681	Converted to G Model		08/04/2008	08-03779	MH-47G	
M3703	**91-00497**	MH-47E		10/21/1993	CH-47C	74-22289	Destroyed by Enemy Action [OEF]	06/11/2006				
M3704	**91-00498**	MH-47E		03/29/1994	CH-47C	74-22288	Converted to G Model		01/31/2009	08-03775	MH-47G	

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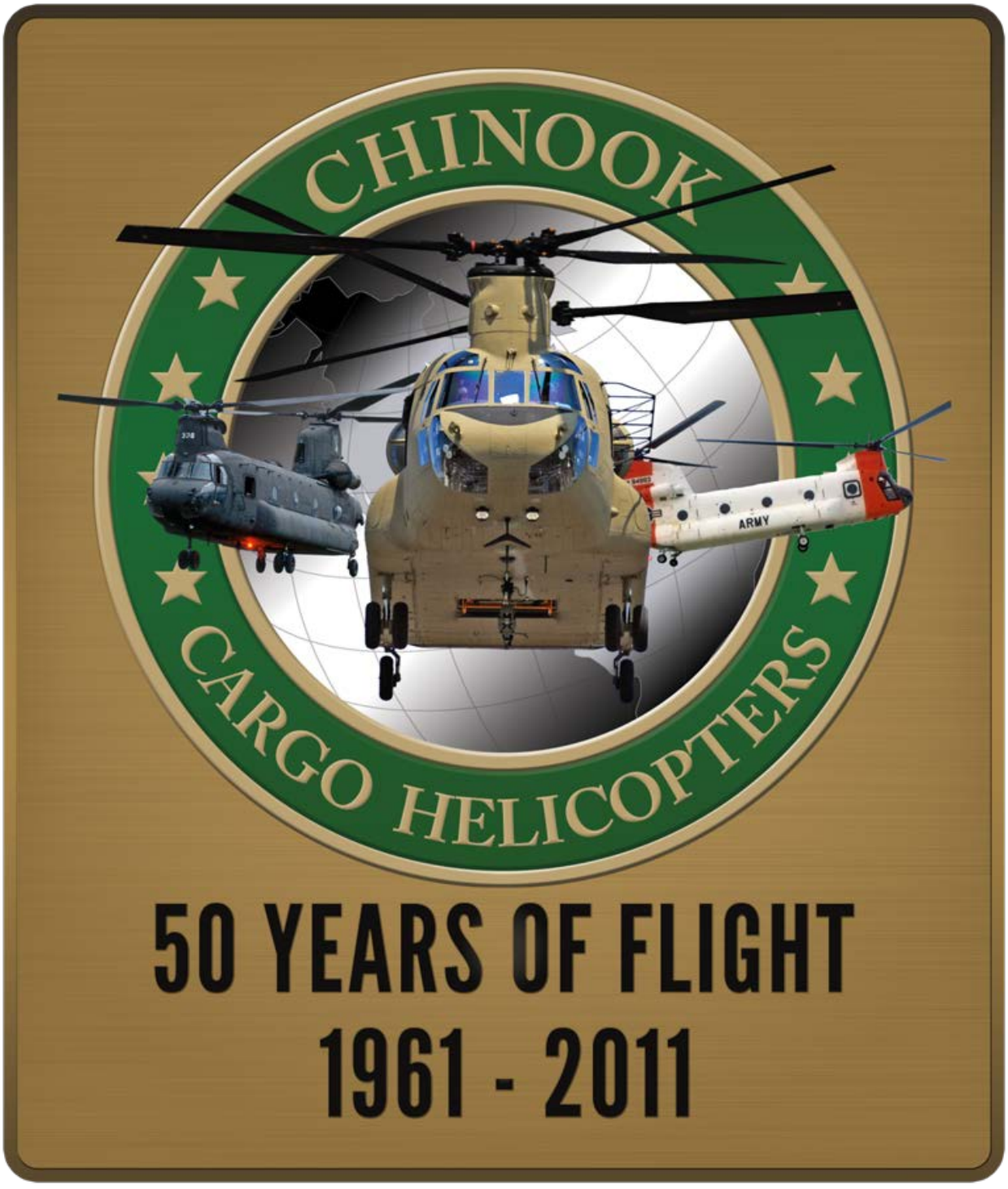
Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model
M3705	**91-00499**	MH-47E		05/17/1994	CH-47C	68-16005	Converted to G Model		01/26/2009	09-03783	MH-47G
M3706	**91-00500**	MH-47E		05/18/1994	CH-47C	74-22277	Converted to G Model		09/09/2007	07-03772	MH-47G
M3707	**91-00501**	MH-47E		06/03/1994	CH-47C	74-22281	E Model Shell/Pending G Model Upgrade		11/24/2009	XX-03788	MH-47G
M3708	**92-00400**	MH-47E		06/10/1994	CH-47C	70-15007	Converted to G Model		07/15/2009	09-03786	MH-47G
M3709	**92-00401**	MH-47E		06/14/1994	CH-47C	70-15029	Converted to G Model		09/16/2009	09-03787	MH-47G
M3710	**92-00402**	MH-47E		07/20/1994	CH-47C	74-22276	Converted to G Model		08/21/2008	08-03780	MH-47G
M3711	**92-00403**	MH-47E		02/08/1994	CH-47C	70-15030	E Model Shell/Pending G Model Upgrade		03/02/2010	XX-03789	MH-47G
M3712	**92-00464**	MH-47E		08/17/1994	CH-47C	74-22284	Converted to G Model		06/12/2007	06-03770	MH-47G
M3713	**92-00465**	MH-47E		08/19/1994	CH-47C	76-22677	Accident/Destroyed [US]	03/07/1996			
M3714	**92-00466**	MH-47E		09/29/1994	CH-47C	74-22285	Converted to G Model		10/19/2007	07-03774	MH-47G
M3715	**92-00467**	MH-47E		10/19/1994	CH-47C	79-23396	Converted to G Model		11/25/2008	09-03782	MH-47G
M3716	**92-00468**	MH-47E		07/11/1994	CH-47C	76-22679	Converted to G Model		07/09/2008	08-03778	MH-47G
M3717	**92-00469**	MH-47E		12/20/1994	CH-47C	71-20946	E Model Shell/Pending G Model Upgrade		04/01/2010	XX-03790	MH-47G
M3718	**92-00470**	MH-47E		09/30/1994	CH-47C	71-20950	Converted to G Model		10/24/2008	08-03781	MH-47G
M3719	**92-00471**	MH-47E		10/28/1994	CH-47C	69-17118	Accident/Destroyed [Phillipines]	02/21/2002			
M3720	**92-00472**	MH-47E		11/16/1994	CH-47C	85-24734	Accident/Destroyed [OEF]	02/17/2007			
M3721	**92-00473**	MH-47E		12/30/1994	CH-47C	79-23394	Converted to G Model		08/17/2007	07-03773	MH-47G
M3722	**92-00474**	MH-47E		03/14/1995	CH-47C	70-15015	Converted to G Model		05/22/2009	09-03785	MH-47G
M3723	**92-00475**	MH-47E		05/08/1995	CH-47C	71-20951	Destroyed by Enemy Action [OEF]	03/04/2002			
M3724	**92-00476**	MH-47E		04/10/1995	CH-47C	71-20954	Converted to G Model		03/18/2008	08-03777	MH-47G
M3725	**92-00477**	MH-47E		05/16/1995	CH-47C	85-24743	Converted to G Model		01/22/2008	08-03776	MH-47G
M3726	**00-02160**	MH-47G		05/19/2004	CH-47D	86-01678	Active				
M3727	**03-03727**	MH-47G		04/14/2005	CH-47D	85-24358	Active				
M3728	**03-03728**	MH-47G		04/28/2005	CH-47D	84-24152	Active				
M3729	**03-03729**	MH-47G		10/08/2004	CH-47D	85-24352	Accident/Destroyed [US]	06/01/2006			
M3730	**03-03730**	MH-47G		11/24/2004	CH-47D	85-04355	Active				
M3731	**03-03731**	MH-47G		12/28/2004	CH-47D	84-24161	Active				
M3732	**03-03732**	MH-47G		01/26/2005	CH-47D	83-24106	Active				
M3733	**03-03733**	MH-47G		02/16/2005	CH-47D	83-24116	Depot - Corpus Christi				
M3734	**03-03734**	MH-47G		03/24/2005	CH-47D	82-23780	Active				
M3735	**04-03735**	MH-47G		05/18/2005	CH-47D	82-23774	Active				
M3736	**04-03736**	MH-47G		05/27/2005	CH-47D	82-23772	Active				
M3737	**04-03737**	MH-47G		06/20/2005	CH-47D	84-24171	Active				
M3738	**04-03738**	MH-47G		06/30/2005	CH-47D	85-24357	Active				
M3739	**04-03739**	MH-47G		07/22/2005	CH-47D	83-54102	Active				
M3740	**04-03740**	MH-47G		07/29/2005	CH-47D	85-24365	Active				
M3741	**04-03741**	MH-47G		08/31/2005	CH-47D	86-01636	Active				
M3742	**04-03742**	MH-47G		08/31/2005	CH-47D	86-01637	Active				
M3743	**04-03743**	MH-47G		09/26/2005	CH-47D	86-01679	Active				
M3744	**04-03744**	MH-47G		09/30/2005	CH-47D	87-00095	Active				
M3745	**04-03745**	MH-47G		10/31/2005	CH-47D	82-23773	Active				
M3746	**04-03746**	MH-47G		10/28/2005	CH-47D	82-23770	Active				
M3747	**04-03747**	MH-47G		11/28/2005	CH-47D	85-24356	Accident/Destroyed [OEF]	10/26/2009			
M3748	**04-03748**	MH-47G		12/15/2005	CH-47D	84-24180	Active				
M3749	**04-03749**	MH-47G		12/29/2005	CH-47D	85-24341	Active				
M3750	**04-03750**	MH-47G		12/30/2005	CH-47D	85-24364	Depot - Corpus Christi				
M3751	**05-03751**	MH-47G		02/27/2006	CH-47D	82-23766	Accident/Destroyed [OEF]	05/13/2010			
M3752	**05-03752**	MH-47G		03/31/2006	CH-47D	81-23387	Active				
M3753	**05-03753**	MH-47G		02/28/2006	CH-47D	81-23385	Active				
M3754	**05-03754**	MH-47G		04/29/2006	CH-47D	83-24112	Active				
M3755	**05-03755**	MH-47G		05/26/2006	CH-47D	83-24108	Active				
M3756	**05-03756**	MH-47G		05/31/2006	CH-47D	85-24359	Active				

Appendix A - H-47 Serial Number Database as of 01 November 2012

Build	SN	Model	Combat	Del Date	Prev Mo...	Prev SN	Disposition as of 1 Nov 2012	Loss Date	Induct Date	New SN	New Model	
M3757	**05-03757**	MH-47G		07/11/2006	CH-47D	81-23388	Active					
M3758	**05-03758**	MH-47G		07/28/2006	CH-47D	82-23762	Active					
M3759	**05-03759**	MH-47G		08/31/2006	CH-47D	83-24117	Active					
M3760	**05-03760**	MH-47G		09/11/2006	CH-47D	82-23779	Active					
M3761	**05-03761**	MH-47G		10/31/2006	CH-47D	82-23767	Active					
M3762	**05-03762**	MH-47G		12/12/2006	CH-47D	84-24160	Active					
M3763	**06-03763**	MH-47G		06/01/2007	CH-47D	81-23386	Active					
M3764	**06-03764**	MH-47G		07/25/2007	MH-47D	89-00161	Active					
M3765	**06-03765**	MH-47G		09/29/2007	MH-47D	85-24342	Active					
M3766	**06-03766**	MH-47G		12/27/2007	MH-47D	89-00131	Active					
M3767	**06-03767**	MH-47G		02/20/2007	MH-47D	85-24361	Active					
M3768	**06-03768**	MH-47G		12/04/2008	MH-47D	85-24360	Active					
M3769	**07-03769**	MH-47G		06/14/2008	CH-47D	82-23778	Active					
M3770	**07-03770**	MH-47G		10/09/2008	MH-47E	92-00464	Active					
M3771	**07-03771**	MH-47G		10/31/2008	MH-47E	88-00267	Active					
M3772	**07-03772**	MH-47G		06/30/2008	MH-47E	91-00500	Active					
M3773	**07-03773**	MH-47G		10/30/2008	MH-47E	92-00473	Active					
M3774	**07-03774**	MH-47G		11/30/2008	MH-47E	92-00466	Active					
M3775	**08-03775**	MH-47G		01/31/2009	MH-47E	91-00498	Active					
M3776	**08-03776**	MH-47G		03/31/2009	MH-47E	92-00477	Active					
M3777	**08-03777**	MH-47G		06/30/2009	MH-47E	92-00476	Active					
M3778	**08-03778**	MH-47G		10/31/2009	MH-47E	92-00468	Active					
M3779	**08-03779**	MH-47G		11/30/2009	MH-47E	91-00496	Active					
M3780	**08-03780**	MH-47G		12/31/2009	MH-47E	92-00402	Active					
M3781	**08-03781**	MH-47G		02/28/2010	MH-47E	92-00470	Active					
M3782	**08-03782**	MH-47G		05/31/2010	MH-47E	92-00467	Active					
M3783	**09-03783**	MH-47G		06/30/2010	MH-47E	91-00499	Active					
M3784	**09-03784**	MH-47G		08/31/2010	MH-47E	90-00414	Active					
M3785	**09-03785**	MH-47G		09/30/2010	MH-47E	92-00474	Active					
M3786	**09-03786**	MH-47G		11/30/2010	MH-47E	92-00400	Active					
M3787	**09-03787**	MH-47G		12/31/2010	MH-47E	92-00401	Active					
M3788	**XX-03788**	MH-47G			MH-47E	91-00501	Pending Production					
M3789	**XX-03789**	MH-47G			MH-47E	92-00403	Pending Production					
M3790	**XX-03790**	MH-47G			MH-47E	92-00469	Pending Production					


CHINOOK
CARGO HELICOPTERS
ARMY
50 YEARS OF FLIGHT
1961 - 2011