## **Bell Helicopter Corporation**

In the early 1930 's, **Arthur Young**, a brilliant young inventor, built and successfully demonstrated a viable, flyable helicopter model.

**Larry Bell**, a successful entrepreneur and founder of the Bell Aircraft Corporation, was so impressed with Young's efforts that in 1941 he set the youthful inventor up in a small shop in Gardenville, New York

At that time Bell was already a manufacturer of conventional aircraft such as the WWII fighter P-39 Airacobra and the P-59, America's first jet-powered airplane. In addition, Bell was to develop the X-1, which was to become the world's first super- sonic plane.

By 1951, Bell helicopters were in service around the world, breaking records as fast as they were setting them. And since Bell Aircraft Corporation's reputation for helicopter manufacture began to rival its reputation as a builder of conventional aircraft, the company created a separate helicopter division which was headquartered in Fort Worth, Texas.

Today, with Bell helicopters flying in more than 120 different countries, they are logging another ten hours every minute of every day.

☐ 1935 : Bell Aircraft Corporation

56 employees make up the entire staff of the newly found Corporation.

□ 1941 :

Development begins on the first Bell helicopter. With a tethered control line model, Arthur Young proves his invention is workable.

□ 1942:

Gardenville, New York becames the site for Arthur Young and his apprentice, **Bartram Kelley** to produce a full-size vertical takeoff aircraft.

□ 1943 : Bell 30

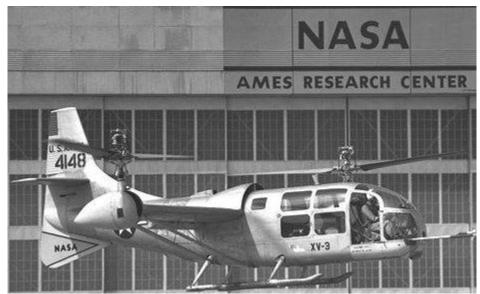


The ship #1 nicknamed Genevieve flies for the first time

□ 1945 : Bell 47 ( H-13 Sioux )



□ March 8, 1946 :
The Bell 47 receives Helicopter Type Certificate No. 1 : NC-1H
It's the first one ever granted by the Civil Aeronautics Board (forerunner of the FAA)
□ <u>1946</u> :
Bell establishes the first flight training school for commercial helicopters pilots
In December, first production helicopters are delivered to the US Army.
□ 1949 : Bell 54 ( YH-15 )
A utility helo for the USAF with a gross weight of 1225 kg
□ <u>1950</u> : <u>Bell 48 ( YH-12 )</u>
13 units built.
□ 1951 :
Bell Helicopter division moves to Hurst, Texas
□ <u>1952</u> :
Agusta Spa licencesing aggreement to built Bell helicopters in Italy
□ March 4, 1953 : Bell 61 ( HSL-1 )
First world's helicopter designed for ASW (antisubmarine warfare) 50 units built then replaced
in the US Navy with the Sikorsky S-58 ( HSS-1 then SH-34 )
□ <u>April, 1953 :</u>
1000th helicopter rolls off the Bell assembly line.
□ <u>1954 : XH-13F</u>
A derivative of the Bell 47, it is the first Bell turbine helicopter.
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□ August 23, 1955 : Bell 200 (XV-3) [XH-33]

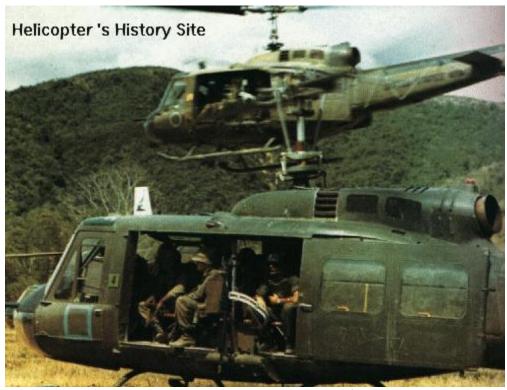


A revolutionary concept, this aircraft converts from takeoff in helicoper mode to straight and level flight like an airplane.

Starting built in 1953, this experimental aircraft flew until 1966, proving the fundamental soundness of the tiltrotor concept and gathering data about technical improvements needed for future designs.

☐ October, 1956 : Bell 204 "Huey" ( UH-1 )

US Army 's first production-line turbine powered utility helicopter.



The Huey is the most representative helicopter of the Vietnam era.

□ <u>1957</u>: Name changed to **Bell Helicopter Corporation** 

□ 1958 :

The XV-3 makes the first conversion of tilting prop-rotor aircraft

□ <u>1960</u>: Spacecraft Recovery Rotor

☐ 1960 : **Textron Inc.** 

Textron purchases the defense activities of Bell Aircraft and set ups **Bell Aerospace Corp** as a wholly owned subsidiary with three divisions.

□ <u>1962</u>: <u>Bell 207 Sioux Scout</u>

A derivative of the Bell 47, this gunship concept demonstrator, was a very important step for Bell and will end in the Model 209 years later. Serial number N73927

□ <u>1962</u>: Bell 533 HPH

An UH-1B modified for research with sweptback wings and side-mounted turbojet engines.

□ 1963 : Bell 206 ( YOH-4 )

Serial number 62-4201 lost US Army LOH (Light Observation Helicopter) competition against the Hughes YOH-6 (the winner) and the Hiller FH-1100 (YOH-5).

However, Bell continue this model that will end in the Bell 206A civilian series and later acquired by the militaries as the H-57/58 .

□ 1963 : Bell 204B ( *H-48* ) Hueys modified as missile site support helos.

☐ March 27, 1965 : Bell 208

An UH-1D fitted with two Continental turbines, was the first twin turbine helicopter built by Bell.

□ January 10, 1966 : Bell 206A JetRanger → PARTS

□ <u>1966</u>:

Bell receives a contract for 2115 UH-1 Iroquois.

A unique radar antenna is built into a blade and succesfully tested.

☐ March 17, 1966 : X-22 Tiltrotor, experimental.

□ Bell 209 Huey Cobra (AH-1)



In 1966, the US Army made a request for a interim gunship helicopter to be complete in one year to be deployed in Vietnam.

The winner was the Bell 209 HueyCobra against gunship derivatives of the Kaman SeaSprite, Boeing Vertol Chinook, Piasecki Pathfinder and Sikorsky S-61





□ 1967 : Bell 205A ( UH-1D )

□ 1967:

Huey Cobras first deployed to Vietnam

☐ <u>1968</u>: <u>TH-57 SeaRanger</u> & OH-58A Kiowa

The US Navy and US Army variants of the Bell 206A.

□ <u>1969</u> : <u>Bell 300</u>

Mock-up. Tiltrotor development continues.

□ <u>1970</u>: <u>Bell 212 ( UH-1N )</u>

## **Twin-turbine Hueys**

After the successful of the Models 204 / 205, Bell joined Pratt & Whitney Canada for develop a twin engine derivative, the result was the **Model 212 Twin Two Twelve**, soon followed by the **Model 214** that was a lengthened version (with single and twin engine) of the Bell 205.

In 1979 appear the Model 412 with a 4 blades main rotor

☐ Sept. 10, 1971: Bell 309 King Cobra

Because the US Army 's **AAFSS** (Advanced Aerial Fire Support System) competition was cancelled (See <u>Lockheed Cheyenne</u>), Bell designed the model 309 King Cobra as a company-funded project, like Sikorsky does with the S-67.

Only 2 units of the KingCobra were built but some of the improvements would be applied to the following US Marines model: the AH-1T

□ 1972 : Bell 214 Huey Plus / Big Lifter

A "big 205", Was first developed for the Iranian Armed Forces

□ 1974 :

Bell conmemorates the delivery of it 20000th helicopter

October 1, 1975 : Bell 409 (YAH-63)

Developed from the Model 309, two units were built for the US Army **AAH** ( Advanced Attack Helicopter ) program.

Lost competition against the Hughes YAH-64.

1976 :

New Name: Bell Helicopter Textron Inc.

The 2000th JetRanger roll out.

□ <u>1977</u>: Bell 222



America 's first commercial midsize twin-turbine helicopter

□ May 3, 1977 : Bell 301 (XV-15)



□ 1978 : Bell 214ST

A 19 place stretched version of the 214 with twin General Electric CT7 turboshafts developing 1625 shp.

□ 1979 : Bell 412

The four-bladed version of the Bell 212



□ <u>1979 :</u>

First sale of US helicopters to China, 8 Bell 212s