

Aircraft Carriers—Yesterday, Today, Tomorrow



Developments in technology and strategic doctrine after WW I proved critical to Naval Aviation as it began to perform its unique mission of conducting air operations at sea. The first steps were taken with the commissioning of *Langley* (CV 1) on 20 March 1922. By the end of the year, the first carrier landings and takeoffs, as well as the first catapult launch, were made as part of the evaluation process leading to *Langley* becoming the first operational aircraft carrier in late 1924. Significant doctrine develop-

ments followed the first-time participation of *Saratoga* (CV 3) and *Lexington* (CV 2) in the Fleet Exercises of 1929. The most notable development to emerge and to be refined in subsequent exercises was the fast carrier task force that would prove effective during WW II against the Imperial Japanese Navy. Shown above are the Navy's first three aircraft carriers docked at the Puget Sound, Wash., Navy Yard in 1931, from left to right: *Lexington*, *Saratoga*, and *Langley*.

Original Classes

Langley: 1 ship (CV 1)

Lexington: 2 ships (CV 2 and 3)

Ranger: 1 ship (CV 4)

Yorktown: 2 ships (CV 5 and 6)

Wasp: 1 ship (CV 7)

Hornet: 1 ship (CV 8)

Essex: 24 ships (CV 9–21, 31–35, 37–40, 45 and 47).

(Of these numbers, 14, 15, 19, 21, 32 or 34, 36–40, 45 and 47 are sometimes referred to as “long-hull”

Essex-class or *Ticonderoga* class.)

Independence: 9 ships (CVL 22–30)

Midway: 3 ships (CVB 41–43)

Saipan: 2 ships (CVL 48 and 49)

Enterprise: 1 ship (CVAN 65)

Forrestal: 4 ships (CVA 59–62)

Kitty Hawk: 4 ships (CVA 63, 64, 66 and 67)

Nimitz: 9 ships (CVN 68–76)

| CV Hull No. | Name | Date of Commission/Decommission Or Loss | Designation Change/Date | Comments |
|-------------|------------------|---|-------------------------|--|
| 1 | <i>Langley</i> | 20 Mar 1922 27 Feb 1942 | AV 3–21 Apr 1937 | Lost, enemy action. |
| 2 | <i>Lexington</i> | 14 Dec 1927 8 May 1942 | | Lost, enemy action. |
| 3 | <i>Saratoga</i> | 16 Nov 1927 | | Expended, Operation Crossroads, 26 Jul 1946. |
| 4 | <i>Ranger</i> | 4 Jun 1934 18 Oct 1946 | | Sold for scrap 31 Jan 1947. |
| 5 | <i>Yorktown</i> | 30 Sep 1937 7 Jun 1942 | | Lost, enemy action. |

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|-------------|--------------------|--|--|--|
| 6 | <i>Enterprise</i> | 12 May 1938 17 Feb 1947 | CVA-1 Oct 1952 CVS-8 Aug 1953 | Sold, 1 Jul 1958. |
| 7 | <i>Wasp</i> | 25 Apr 1940 15 Sep 1942 | | Lost, enemy action. |
| 8 | <i>Hornet</i> | 20 Oct 1941 26 Oct 1942 | | Lost, enemy action. |
| 9 | <i>Essex</i> | 31 Dec 1942 30 Jun 1969 | CVA-1 Oct 1952 CVS-8 Mar 1960 | Stricken 1 Jun 1973. |
| 10 | <i>Yorktown</i> | 15 Apr 1943 27 Jun 1970 | CVA-1 Oct 1952 CVS-1 Sep 1957 | Stricken 1 Jun 1973. Floating museum, Charleston, SC, 13 Nov 1975. |
| 11 | <i>Intrepid</i> | 16 Aug 1943 15 Mar 1974 | CVA-1 Oct 1952 CVS-31 Mar 1962 | Floating museum, New York, NY. |
| 12 | <i>Hornet</i> | 29 Nov 1943 26 May 1970 | CVA-1 Oct 1952 CVS-27 Jun 1958 | Stricken 1989. |
| 13 | <i>Franklin</i> | 31 Jan 1944 17 Feb 1947 | CVA-1 Oct 1952 CVS-8 Aug 1953 | Stricken 10 Oct 1964. |
| 14 | <i>Ticonderoga</i> | 8 May 1944 1 Sep 1973 | CVA-1 Oct 1952 CVS-21 Oct 1969 | Stricken 16 Nov 1973. |
| 15 | <i>Randolph</i> | 9 Oct 1944 13 Feb 1969 | CVA-1 Oct 1952 CVS-31 Mar 1959 | Stricken 1 Jun 1973. |
| 16 | <i>Lexington</i> | 17 Feb 1943 8 Nov 1991 | CVA-1 Oct 1952 CVS-1 Oct 1962 CVT-1 Jan 1969 AVT-1 Jul 1978 | Stricken 30 Nov 1991. |



All doubt as to the power of carrier forces vanished after the surprise attack launched by Japanese naval forces against Pearl Harbor on 7 December 1941. With heavy battleship losses from the attack, aircraft carriers became the fleet's striking power, a role for which they proved well suited. At the Battle of Coral Sea—the first naval engagement fought without opposing ships making visual contact—*Yorktown* (CV 5) and *Lexington* attacked the carrier covering force, sinking *Shoho*

and damaging *Shokaku*, which prevented the Japanese from occupying Port Moresby, New Guinea. Based on intercepted signal intelligence, forces from *Yorktown*, *Hornet* (CV 8) and *Enterprise* (CV 6) surprised Japanese forces attacking Midway and sank the carriers *Akagi*, *Kaga*, *Soryu* and *Hiryu*, ending the Japanese offensive and effectively turning the tide of the war in the Pacific. Above, *Enterprise* under attack during the Battle of the Santa Cruz Islands in October 1942.

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|----------------------------|--------------------------|---|--|---|
| 17 | <i>Bunker Hill</i> | 25 May 1943 9 Jul 1947 | CVA-1 Oct 1952 CVS-8 Aug 1953 | Stricken 1 Nov 1966, retained as moored electronic test ship, San Diego, CA, until Nov 1972. Scrapped 1973. |
| 18 | <i>Wasp</i> | 24 Nov 1943 1 Jul 1972 | CVA-1 Oct 19 CVS-1 Nov 1956 | Sold for scrap 21 May 1973. |
| 19 | <i>Hancock</i> | 15 Apr 1944 30 Jan 1976 | CVA-1 Oct 1952 CV-30 Jun 1975 | Stricken 31 Jan 1976. |
| 20 | <i>Bennington</i> | 6 Aug 1944 15 Jan 1970 | CVA-1 Oct 1952 CVS-30 Jun 1959 | Stricken 1989. |
| 21 | <i>Boxer</i> | 16 Apr 1945 1 Dec 1969 | CVA-1 Oct 1952 CVS-1 Feb 1956 LPH 4-30 Jan 1959 | Stricken 1 Dec 1969. |
| 22 | <i>Independence</i> | CVL-14 Jan 1943 28 Aug 1946 | | Sunk in weapons test 29 Jan 1951. |
| 23 | <i>Princeton</i> | CVL-25 Feb 1943 24 Oct 1944 | | Lost, enemy action. |
| 24 | <i>Belleau Wood</i> | CVL-31 Mar 1943 13 Jan 1947 | | Transferred to France 1953-1960. Stricken 1 Oct 1960. |
| 25 | <i>Cowpens</i> | CVL-28 May 1943 13 Jan 1947 | AVT 1-15 May 1959 | Stricken 1 Nov 1959. |
| 26 | <i>Monterey</i> | CVL-17 Jun 1943 16 Jan 1956 | AVT 2-15 May 1959 | Stricken 1 Jun 1970. |
| 27 | <i>Langley</i> | CVL-31 Aug 1943 11 Feb 1947 | | Transferred to France 1951-1963. Sold 19 Feb 1964. |
| 28 | <i>Cabot</i> | CVL-24 Jul 1943 21 Jan 1955 | AVT 3-15 May 1959 | Transferred to Spain 30 Aug 1967; returned to private U.S. organization 1989. |
| 29 | <i>Bataan</i> | CVL-17 Nov 1943 9 Apr 1954 | AVT 4-15 May 1959 | Stricken 1 Sep 1959. |
| 30 | <i>San Jacinto</i> | CVL-15 Dec 1943 1 Mar 1947 | AVT 5-15 May 1959 | Stricken 1 Jun 1970. |
| 31 | <i>Bon Homme Richard</i> | 26 Nov 1944 2 Jul 1971 | CVA-1 Oct 1952 | Stricken 1989. |
| 32 | <i>Leyte</i> | 11 Apr 1946 15 May 1959 | CVA-1 Oct 1952 CVS-8 Aug 1953 AVT 10-15 May 1959 | Stricken 1 Jun 1969. |
| 33 | <i>Kearsarge</i> | 2 Mar 1946 15 Jan 1970 | CVA-1 Oct 1952 CVS-1 Oct 1958 | Stricken 1 May 1973. |
| 34 | <i>Oriskany</i> | 25 Sep 1950 20 Sep 1976 | CVA-1 Oct 1952 CV-30 Jun 1975 | Stricken 1989. |
| 36 | <i>Antietam</i> | 28 Jan 1945 8 May 1963 | CVA-1 Oct 1952 CVS-8 Aug 1953 | Stricken 1 May 1973. |

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|-------------|------------------------------|---|---|-------------------------------|
| 37 | <i>Princeton</i> | 18 Nov 1945 30 Jan 1970 | CVA-1 Oct 1952 CVS-1 Jan 1954 LPH 5-2 Mar 1959 | Stricken 30 Jan 1970. |
| 38 | <i>Shangri-La</i> | 15 Sep 1944 30 Jul 1971 | CVA-1 Oct 1952 CVS-30 Jun 1969 | Stricken 15 Jul 1982. |
| 39 | <i>Lake Champlain</i> | 3 Jun 1945 2 May 1966 | CVA-1 Oct 1952 CVS-1 Aug 1957 | Stricken 1 Dec 1969. |
| 40 | <i>Tarawa</i> | 8 Dec 1945 13 May 1960 | CVA-1 Oct 1952 CVS-10 Jan 1955 AVT 12-17 Apr 1961 | Stricken 1 Jun 1967. |
| 41 | <i>Midway</i> | CVB-10 Sep 1945 11 Apr 1992 | CVA-1 Oct 1952 CV-30 Jun 1975 | In reserve. |
| 42 | <i>Franklin D. Roosevelt</i> | CVB-27 Oct 1945 1 Oct 1977 | CVA-1 Oct 1952 CV-30 Jun 1975 | Stricken 30 Sep 1977. |
| 43 | <i>Coral Sea</i> | CVB-1 Oct 1947 26 Apr 1990 | CVA-1 Oct 1952 CV-30 Jun 1975 | Scrapped Baltimore, MD, 1993. |
| 45 | <i>Valley Forge</i> | 3 Nov 1946 15 Jan 1970 | CVA-1 Oct 1952 CVS-1 Jan 1954 LPH 8-1 Jul 1961 | Stricken 15 Jan 1970. |



The introduction of jet aircraft into Naval Aviation highlighted the need to modify existing and design new aircraft carriers to meet evolving operational requirements. Technological advances bridged the gap with innovations such as the steam catapult; the addition of an angled deck aboard *Antietam* (CV 36); the commissioning of *Forrestal* (CVA 59), the first carrier specifically designed for jet aircraft operations (shown above in October 1957); and the commissioning of *Enterprise* (CVAN 65), the first nuclear-powered aircraft carrier (right).



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|-------------|-----------------------------|---|---|--|
| 47 | <i>Philippine Sea</i> | 11 May 1946 28 Dec 1958 | CVA-1 Oct 1952 CVS-15 Nov 1955 AVT 11-15 May 1959 | Stricken 1 Dec 1969. |
| 48 | <i>Saipan</i> | CVL-14 Jul 1946 14 Jan 1970 | AVT 6-15 May 1959 AGMR 2-8 Apr 1965 | Renamed <i>Arlington</i> . |
| 49 | <i>Wright</i> | CVL-9 Feb 1947 22 May 1970 | AVT 7-15 May 1959 CC 2-11 May 1963 | |
| 59 | <i>Forrestal</i> | CVA-1 Oct 1955 30 Sep 1993 | CV-30 Jun 1975 AVT-4 Feb 1992 | |
| 60 | <i>Saratoga</i> | CVA-14 Apr 1956 20 Aug 1994 | CV-30 Jun 1972 | Stricken 30 Sep 1994. |
| 61 | <i>Ranger</i> | CVA-10 Aug 1957 10 Jul 1993 | CV-30 Jun 1975 | Inactive in Reserve. |
| 62 | <i>Independence</i> | CVA-10 Jan 1959 | CV-28 Feb 1973 | Active. |
| 63 | <i>Kitty Hawk</i> | CVA-29 Apr 1961 | CV-29 Apr 1973 | Active. |
| 64 | <i>Constellation</i> | CVA-27 Oct 1961 | CV-30 Jun 1975 | Active. |
| 65 | <i>Enterprise</i> | CVAN-24 Nov 1961 | CVN-30 Jun 1975 | Active. |
| 66 | <i>America</i> | CVA-23 Jan 1965 30 Sep 1996 | CV-30 Jun 1975 | Inactive in Reserve. |
| 67 | <i>John F. Kennedy</i> | CVA-7 Sep 1968 | CV-29 Apr 1973 | Active. |
| 68 | <i>Nimitz</i> | CVAN-3 May 1975 | CVN-30 Jun 1975 | Active. |
| 69 | <i>Dwight D. Eisenhower</i> | CVN-18 Oct 1977 | | Active. |
| 70 | <i>Carl Vinson</i> | CVN-13 Mar 1982 | | Active. |
| 71 | <i>Theodore Roosevelt</i> | CVN-25 Oct 1986 | | Active. |
| 72 | <i>Abraham Lincoln</i> | CVN-11 Nov 1989 | | Active. |
| 73 | <i>George Washington</i> | CVN-4 Jul 1992 | | Active. |
| 74 | <i>John C. Stennis</i> | CVN-9 Dec 1995 | | Active. |
| 75 | <i>Harry S. Truman</i> | CVN | | Keel laid 29 Nov 1993. |
| 76 | <i>Ronald Reagan</i> | CVN | | Construction begun 1996. Planned completion 2002. |

Note 1: Construction of the hull numbers omitted above were either terminated or canceled. Numbers 35, 46 and 50-55 were scheduled for *Essex* class; 44, 56 and 57 for *Midway* class; number 58 was *United States*.

Note 2: The contracts originally let for CV 59 and 60 (*Forrestal* and *Saratoga*) did not include an angled deck in their designs. In 1953 the Navy redesigned the flight deck plans for *Forrestal*, incorporating an angled landing deck. These design changes were made to *Saratoga*. The contract for *Forrestal* was awarded in 1951 and for *Saratoga* in 1952, *Ranger* and *Independence* (CV 61 and 62) in 1954. Therefore, the original contract designs for *Ranger* and *Independence* would have included an angled deck. Technically, *Ranger* (CVA 61) was the first carrier designed and built as an angled-deck carrier.