

# Combat Air Craft Carrier in the Deep Seas

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Aircraft carriers are warships that act as airbases for fighter aircrafts to land and take off.



**Air Craft Carriers** are part of the Navy's fleet of warships on sea and are floating airbase to assist war strategies and combat on sea. These are designed to carry combat aircrafts and are equipped with well laid out runway for combat aircrafts to take off and land.

In the age of electronic warfare Artificial Intelligence is being used to equip the warships and Aircraft Carriers to meet up the modern day advanced warfare.

# Indian Aircraft Carrier

## INS Vikrant



India is gradually strengthening its Armed Forces with latest and also indigenously made equipment. Aircraft Carriers are one of those important segments of Indian Navy, which adds adequate strength and helps in strategic positioning in a combat situation on the sea. The fighter jets directly take off from the deck and also land. They are equipped to provide the required strength and base for the speedy aircrafts to land and take off.



## India's First indigenous Aircraft Carrier, INS Vikrant begins Second Phase of Sea Trials

After a long wait, the [Indian Navy's first indigenous aircraft carrier](#) went into the seas for the first time. The [five-day-long sea trials](#) along with helicopter operations are being considered a big breakthrough, but the crew is now gearing up for fighter jet trials to be ready for commissioning next year.

The mammoth warship, that will be called INS Vikrant, is the [Indian Navy's first Made in India aircraft carrier](#). This takes India into a select band of seven countries -- the USA, the UK, France, Russia, Italy, and China - to have niche capabilities to design and build an aircraft carrier. The Indian Navy's previous aircraft carriers were acquired from the UK and Russia.



## **A Floating Air base**

An aircraft carrier is a mini floating 'airbase' at sea which sets it apart from other warships in terms of operations, reach, and complexities.

"It is central to Navy's operations for sea control. Thirty aircraft and helicopters can be operated from this ship. This will enable sea control far off from the country, both in times of war and peace," Vice Admiral AK Chawla, Flag Officer Commanding in Chief, Southern Naval Command, said.



Vikrant is 262 m long, 62 m at the widest part, and has a depth of 30 m minus the superstructure. There are 14 decks in all, including five in the superstructure. The ship has over

2,300 compartments, designed for a crew of around 1,700 personnel, including specialised cabins to accommodate women officers when embarked.

While the final touches to the construction work are on, the ship managed to go into the seas with 1,200 personnel on board.

## **INS Vikramaditya**







**INS Vikramaditya** (Sanskrit, Vikramāditya meaning "**Brave as the Sun**") is a **modified Kiev-class aircraft carrier** which entered into service with the Indian Navy in 2013. She has been renamed in honour of Vikramāditya, a legendary emperor of Ujjain, in India.

## VIKRAMADITYA: SYMBOL OF POWER AT SEA

COMMISSIONED | **Nov 2013**

DISPLACEMENT | **44,500 tonne**

MAX SPEED | **30 knots**

MAX RANGE | **7,000 nautical miles**  
at economical 18 knots speed

CAPACITY | 24 MiG-29K supersonic fighters & 10 helicopters (anti-submarine Ka-28s, early-warning KM-31s, Dhruv ALH & Chetaks)

CREW »

**110 officers,**  
**1,500 sailors**

LENGTH

**284 metre**

HEIGHT

**60 metre**

(20-storey tall,  
with 22 decks)

COST » **\$2.33 billion**

(for Admiral Gorshkov's refit),  
plus \$2 billion (for 45 MiG-29Ks)

### POWER PLAY

A carrier battle group is the most visible symbol of raw combat power prowling on the high seas

US has 11 Nimitz-class nuclear-powered "**super-carriers**". Each over **94,000-tonne** & capable of **carrying 80-90 fighters**

China inducted its first **65,000-tonne** carrier Liaoning in Sept 2012. Second one under construction, with **2 more in the pipeline**

India & Italy have **2 carriers** each

UK, France, Russia, Spain, Brazil & Thailand have **1 carrier** each



## American Aircraft Carrier





In the [United States Navy](#), these consist of ships commissioned with [hull classification symbols](#) CV (aircraft carrier), CVA (attack aircraft carrier), CVB (large aircraft carrier), CVL (light aircraft carrier), CVN (aircraft carrier (nuclear propulsion)). Beginning with the [Forrestal-class](#), (CV-59 to present) all carriers commissioned into service are classified as [super carriers](#). The United States Navy has also used [escort aircraft carriers](#) (CVE) and [airship aircraft carriers](#). This list does not include various [amphibious warfare ships](#) which can operate as carriers




### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-1	<a href="#"><i>Langley</i></a>		<a href="#"><i>Langley</i></a> ( <a href="#">lead ship</a> )	20 March 1922	27 February 1942	19 years, 344 days	<a href="#">Scuttled</a> and <a href="#">sunk</a> near <a href="#">Cilacap, Java</a> <a href="#">in 1942</a>	<a href="#">[16]</a> <a href="#">[17]</a> <a href="#">[18]</a>
CV-2	<a href="#"><i>Lexington</i></a>		<a href="#"><i>Lexington</i></a> ( <a href="#">lead ship</a> )	14 December 1927	8 May 1942	14 years, 145 days	Sunk in the <a href="#">Battle of the Coral Sea</a> in 1942	<a href="#">[18]</a> <a href="#">[19]</a>

## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-3	<a href="#"><i>Saratoga</i></a>		<i>Lexington</i>	16 November 1927	26 July 1946	18 years, 254 days	Sunk as <a href="#">target ship</a> near <a href="#">Bi kini Atoll</a> during <a href="#">Operation Crossroads</a> in 1946	<a href="#">[18]</a> <a href="#">[20]</a>
CV-4	<a href="#"><i>Ranger</i></a>		<a href="#"><i>Ranger</i></a> (lea d ship)	4 June 1934	18 October 1946	12 years, 136 days	<a href="#">Scrapped</a> in 1947	<a href="#">[21]</a>

## List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-5	<a href="#">Yorktown</a>		<a href="#">Yorktown</a> (l ead ship)	30 September 1937	7 June 1942	4 years, 250 days	Sunk in the <a href="#">Battle of Midway</a> in 1942	<a href="#">[22]</a>
CV-6	<a href="#">Enterprise</a>		<i>Yorktown</i>	12 May 1938	17 February 1947	8 years, 281 days	Scrapped in 1960	<a href="#">[23]</a>





### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-7	<a href="#">Wasp</a>		<a href="#">Wasp</a> (lead ship)	25 April 1940	15 September 1942	2 years, 143 days	Sunk during the <a href="#">Guadalcanal campaign</a> in 1942	<sup>[24]</sup>
CV-8	<a href="#">Hornet</a>		<i>Yorktown</i>	20 October 1941	26 October 1942	1 year, 6 days	Sunk in the <a href="#">Battle of the Santa Cruz Islands</a> in 1942	<sup>[25][26]</sup>



## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-9	<a href="#">Essex</a>		<a href="#">Essex</a> (lead ship)	31 December 1942	20 June 1969	26 years, 171 days	Scrapped in 1975	<a href="#">[27]</a>
CV-10	<a href="#">Yorktown</a>		Essex	15 April 1943	27 June 1970	27 years, 73 days	Preserved at the <a href="#">Patriot's Point Naval &amp; Maritime Museum</a> — <a href="#">Mount Pleasant, South Carolina, USA</a>	<a href="#">[28]</a>

### List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-11	<a href="#"><i>Intrepid</i></a>		<i>Essex</i>	16 August 1943	15 March 1974	30 years, 211 days	Preserved at the <a href="#">Intrepid Sea-Air- Space Museum</a> — <a href="#">New York City, New York, USA</a>	<a href="#">[29]</a>
CV-12	<a href="#"><i>Hornet</i></a>		<i>Essex</i>	20 November 1943	26 May 1970	26 years, 187 days	Preserved at <a href="#">USS Hornet Museum</a> — <a href="#">Alameda, California, USA</a>	<a href="#">[30]</a>

## List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-13	<a href="#"><i>Franklin</i></a>		<i>Essex</i>	31 January 1944	17 February 1947	2 years, 351 days	Scrapped in 1966	<a href="#">[31]</a>
CV-14	<a href="#"><i>Ticonderoga</i></a>		<i>Essex</i> ( <a href="#">exte nded bow</a> )	8 May 1944	1 September 1973	29 years, 116 days	Scrapped in 1975	<a href="#">[32]</a>



## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-15	<a href="#">Randolph</a>		Essex (exte nded bow)	9 October 1944	13 February 1969	24 years, 127 days	Scrapped in 1975	<a href="#">[33]</a>
CV-16	<a href="#">Lexington</a>		Essex	17 February 1943	8 November 1991	48 years, 264 days	Preserved at <a href="#">USS Lexi ngton Muse um on the Bay— Corpus Christi, Texas</a> , USA	<a href="#">[34]</a> <a href="#">[35]</a>


## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-17	<a href="#"><i>Bunker Hill</i></a>		<i>Essex</i>	25 May 1943	9 July 1947	4 years, 45 days	Scrapped in 1973	<a href="#">[36]</a> <a href="#">[37]</a> <a href="#">[38]</a>
CV-18	<a href="#"><i>Wasp</i></a>		<i>Essex</i>	24 November 1943	1 July 1972	28 years, 220 days	Scrapped in 1973	<a href="#">[39]</a>

### List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-19	<a href="#"><i>Hancock</i></a>		<i>Essex</i> (exte nded bow)	15 April 1944	30 January 1976	31 years, 290 days	Scrapped in 1976	<a href="#">[40]</a>
CV-20	<a href="#"><i>Bennington</i></a>		<i>Essex</i>	6 August 1944	15 January 1970	25 years, 162 days	Scrapped in 1994	<a href="#">[41]</a>

## List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-21	<a href="#"><i>Boxer</i></a>		<i>Essex</i> (exte nded bow)	16 April 1945	1 December 1969	24 years, 229 days	Scrapped in 1971	<a href="#">[42]</a> <a href="#">[43]</a>
CVL-22	<a href="#"><i>Independence</i></a>		<a href="#"><i>Independence</i></a> (lead ship)	14 January 1943	28 August 1946	3 years, 226 days	Sunk as target ship near the <a href="#">Farallon Islands</a> in 1951	<a href="#">[44]</a>



## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVL-23	<a href="#">Princeton</a>		<i>Independen ce</i>	25 February 1943	24 October 1944	1 year, 242 days	Sunk in the <a href="#">Battle of Leyte Gulf</a> in 1944	<a href="#">[14]</a>
CVL-24	<a href="#">Belleau Wood</a>		<i>Independen ce</i>	31 March 1943	13 January 1947	3 years, 288 days	Scrapped in 1960	<a href="#">[14]</a>

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVL-25	<a href="#">Cowpens</a>		<i>Independen ce</i>	28 May 1943	13 January 1947	3 years, 230 days	Scrapped in 1960	<a href="#">[14]</a>
CVL-26	<a href="#">Monterey</a>		<i>Independen ce</i>	17 June 1943	16 January 1956	12 years, 213 days	Scrapped in 1971	<a href="#">[14]</a>

### List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVL-27	<a href="#">Langley</a>		<i>Independen ce</i>	31 August 1943	11 February 1947	3 years, 164 days	Scrapped in 1964	<a href="#">[14]</a>
CVL-28	<a href="#">Cabot</a>		<i>Independen ce</i>	24 July 1943	21 January 1955	11 years, 181 days	Scrapped in 2002	<a href="#">[14]</a>

### List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVL-29	<a href="#">Bataan</a>		<i>Independen ce</i>	17 November 1943	9 April 1954	10 years, 143 days	Scrapped in 1961	<a href="#">[45]</a>
CVL-30	<a href="#">San Jacinto</a>		<i>Independen ce</i>	15 December 1943	1 March 1947	3 years, 76 days	Scrapped in 1972	<a href="#">[14]</a>



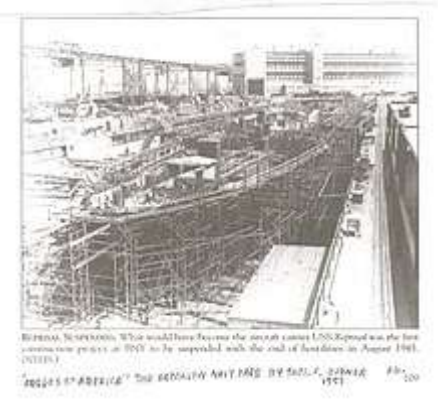

## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-31	<a href="#"><i>Bon Homme Richard</i></a>		<i>Essex</i>	26 November 1944	2 July 1971	26 years, 218 days	Scrapped in 1992	<a href="#">[46]</a>
CV-32	<a href="#"><i>Leyte</i></a>		<i>Essex (exte nded bow)</i>	11 April 1946	15 May 1959	13 years, 34 days	Scrapped in 1970	<a href="#">[14]</a>

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-33	<a href="#"><i>Kearsarge</i></a>		Essex (exte nded bow)	2 May 1946	15 January 1970	23 years, 258 days	Scrapped in 1974	<a href="#">[47]</a>
CV-34	<a href="#"><i>Oriskany</i></a>		Essex (exte nded bow)	25 September 1950	20 September 1979	28 years, 360 days	Scuttled as artificial reef in the <a href="#">Gulf of Mexico</a> in 2006	<a href="#">[14]</a>

## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-35	<a href="#"><i>Reprisal</i></a>		Essex (exte nded bow)	N/A	N/A	N/A	Cancelled during construction . Scrapped in 1949	<a href="#">[48]</a>
CV-36	<a href="#"><i>Antietam</i></a>		Essex (exte nded bow)	28 January 1945	8 May 1963	18 years, 100 days	Scrapped in 1974	<a href="#">[49]</a>

## List of aircraft carriers of the United States Navy



Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-37	<a href="#"><i>Princeton</i></a>		<i>Essex</i> (exte nded bow)	18 November 1945	30 January 1970	24 years, 73 days	Scrapped in 1971	
CV-38	<a href="#"><i>Shangri- La</i></a>		<i>Essex</i> (exte nded bow)	15 September 1944	30 July 1971	26 years, 318 days	Scrapped in 1988	<a href="#">[50]</a>




## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-39	<a href="#"><i>Lake Champlain</i></a>		<i>Essex (exte nded bow)</i>	3 July 1945	2 May 1966	20 years, 303 days	Scrapped in 1972	
CV-40	<a href="#"><i>Tarawa</i></a>		<i>Essex (exte nded bow)</i>	8 December 1945	13 May 1960	14 years, 157 days	Scrapped in 1968	

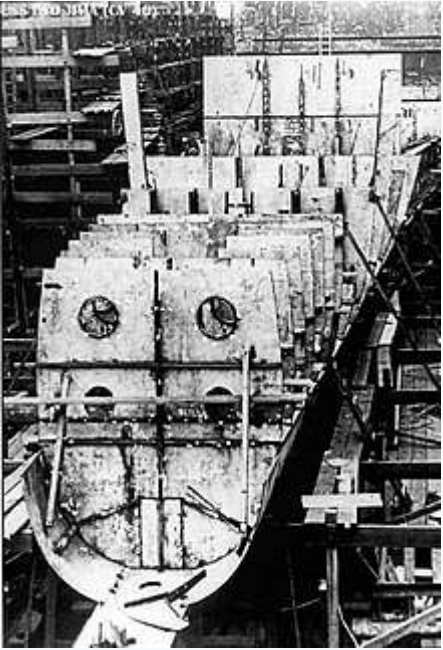
### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVB-41	<a href="#"><i>Midway</i></a>		<a href="#"><i>Midway</i></a> (lea d ship)	10 September 1945	11 April 1992	46 years, 214 days	Preserved at the <a href="#"><i>USS Mi dway Museum</i></a> — <a href="#"><i>San Diego, California, USA</i></a>	<a href="#">[51]</a>
CVB-42	<a href="#"><i>Franklin D. Roosevelt</i></a>		<i>Midway</i>	27 October 1945	1 October 1977	31 years, 339 days	Scrapped in 1978	<a href="#">[52]</a>
CVB-43	<a href="#"><i>Coral Sea</i></a>		<i>Midway</i>	1 October 1947	26 April 1990	42 years, 207 days	Scrapped in 1993	<a href="#">[53]</a>



## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-44	No name assigned	(no image available)	<i>Midway</i>	N/A	N/A	N/A	Cancelled before construction began.	<a href="#">[54]</a>
CV-45	<a href="#"><i>Valley Forge</i></a>		<i>Essex</i> (extended bow)	3 November 1946	15 January 1970	23 years, 73 days	Scrapped in 1971	


## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-46	<a href="#"><i>Iwo Jima</i></a>		Essex (exte nded bow)	N/A	N/A	N/A	Cancelled during construction . Scrapped in 1946	<a href="#">[55]</a>



### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-47	<a href="#">Philippine Sea</a>		Essex (exte nded bow)	11 May 1946	28 December 1958	12 years, 231 days	Scrapped in 1971	
CVL-48	<a href="#">Saipan</a>		<a href="#">Saipan</a> (lea d ship)	14 July 1946	14 January 1970	23 years, 184 days	Scrapped in 1976	

### List of aircraft carriers of the United States Navy


Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVL-49	<a href="#">Wright</a>		<i>Saipan</i>	9 February 1947	15 March 1956	9 years, 35 days	Scrapped in 1980	<a href="#">[14]</a>
CV-50 – CV-55	No names assigned	(no images available)	<i>Essex</i>	These hulls were all cancelled before construction began.				<a href="#">[54]</a>
CVB-56, CVB-57			<i>Midway</i>					
CVA-58	<a href="#">United States</a>		<a href="#">United States</a> (lead ship)	N/A	N/A	N/A	Cancelled during construction . Scrapped	<a href="#">[56]</a>

## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
							on slip in 1949	
CV-59	<a href="#"><i>Forrestal</i></a>		<a href="#"><i>Forrestal</i></a> (le ad ship)	1 October 1955	30 September 1993	37 years, 364 days	Scrapped in 2014	<a href="#">[57]</a> <a href="#">[58]</a> <a href="#">[59]</a> <a href="#">[60]</a>
CV-60	<a href="#"><i>Saratoga</i></a>		<i>Forrestal</i>	14 April 1956	20 August 1994	38 years, 128 days	Scrapped in 2015	<a href="#">[61]</a>





## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-61	<a href="#"><i>Ranger</i></a>		<i>Forrestal</i>	10 August 1957	10 July 1993	35 years, 334 days	Scrapped in 2017	<a href="#">[62]</a>



### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CV-62	<a href="#"><i>Independence</i></a>		<i>Forrestal</i>	10 January 1959	30 September 1998	39 years, 263 days	Scrapped in 2019	<a href="#">[63]</a>
CV-63	<a href="#"><i>Kitty Hawk</i></a>		<a href="#"><i>Kitty Hawk</i></a> (lead ship)	29 April 1961	12 May 2009	48 years, 13 days	Sold for scrap in 2021	<a href="#">[64]</a> <a href="#">[65]</a> <a href="#">[66]</a> <a href="#">[67]</a>
CV-64	<a href="#"><i>Constellation</i></a>		<i>Kitty Hawk</i>	27 October 1961	7 August 2003	41 years, 284 days	Scrapped in 2015	<a href="#">[68]</a>

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-65	<a href="#"><i>Enterprise</i></a>		<a href="#"><i>Enterprise</i></a> (lead ship)	25 November 1961	3 February 2017	55 years, 70 days	Struck, to be scrapped	<a href="#">[69]</a>
CV-66	<a href="#"><i>America</i></a>		<i>Kitty Hawk</i>	23 January 1965	9 August 1996	31 years, 199 days	Sunk as target ship in the <a href="#">Atlantic Ocean</a> in 2005	<a href="#">[70]</a>
CV-67	<a href="#"><i>John F. Kennedy</i></a>		<a href="#"><i>John F. Kennedy</i></a> (lead ship)	7 September 1968	23 March 2007	38 years, 197 days	Sold for scrap in 2021	<a href="#">[71]</a> <a href="#">[72]</a>

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-68	<a href="#"><i>Nimitz</i></a>		<a href="#"><i>Nimitz</i></a> (lead ship)	3 May 1975	—	46 years, 194 days	Stationed at <a href="#">Naval Base Kitsap</a> , Bremerton, Washington	<a href="#">[73]</a>
CVN-69	<a href="#"><i>Dwight D. Eisenhower</i></a>		<i>Nimitz</i>	18 October 1977	—	44 years, 26 days	Stationed at <a href="#">Naval Station Norfolk</a> , Norfolk, Virginia	<a href="#">[74]</a>
CVN-70	<a href="#"><i>Carl Vinson</i></a>		<i>Nimitz</i>	13 March 1982	—	39 years, 245 days	Stationed at <a href="#">Naval Air Station North Island</a> , San Diego, California	<a href="#">[75]</a> <a href="#">[76]</a>


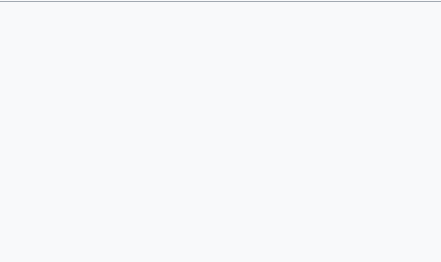

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-71	<a href="#"><i>Theodore Roosevelt</i></a>		<i>Nimitz</i>	25 October 1986	—	35 years, 19 days	Stationed at <a href="#">Naval Base Kitsap</a> , Bremerton, Washington	<sup>[77]</sup> <sup>[78]</sup>
CVN-72	<a href="#"><i>Abraham Lincoln</i></a>		<i>Nimitz</i>	11 November 1989	—	32 years, 2 days	Stationed at <a href="#">Naval Air Station North Island</a> , San Diego, California	<sup>[79]</sup>
CVN-73	<a href="#"><i>George Washington</i></a>		<i>Nimitz</i>	4 July 1992	—	29 years, 132 days	Stationed at <a href="#">Newport News Shipbuilding</a> , Newport News, Virginia	<sup>[80]</sup>

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-74	<a href="#"><i>John C. Stennis</i></a>		<i>Nimitz</i>	9 December 1995	—	25 years, 339 days	Stationed at <a href="#">Naval Station Norfolk</a> , Norfolk, Virginia	<sup>[81]</sup>
CVN-75	<a href="#"><i>Harry S. Truman</i></a>		<i>Nimitz</i>	25 July 1998	—	23 years, 111 days	Stationed at <a href="#">Naval Station Norfolk</a> , Norfolk, Virginia	<sup>[82]</sup>

### List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-76	<a href="#"><i>Ronald Reagan</i></a>		<i>Nimitz</i>	12 July 2003	—	18 years, 124 days	Stationed at <a href="#">Yokosuka Naval Base</a> , Yokosuka, Japan	<sup>[83]</sup>
CVN-77	<a href="#"><i>George H.W. Bush</i></a>		<i>Nimitz</i>	10 January 2009	—	12 years, 307 days	Stationed at <a href="#">Naval Station Norfolk</a> , Norfolk, Virginia	<sup>[84]</sup>
CVN-78	<a href="#"><i>Gerald R. Ford</i></a>		<a href="#"><i>Gerald R. Ford</i></a> (lead ship)	22 July 2017	—	4 years, 114 days	Stationed at <a href="#">Naval Station Norfolk</a> , Norfolk, Virginia	<sup>[85]</sup>








## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-79	<a href="#"><i>John F. Kennedy</i></a>		<i>Gerald R. Ford</i>	~2022	—	—	Fitting out	<a href="#">[11][86]</a>
CVN-80	<a href="#"><i>Enterprise</i></a>		<i>Gerald R. Ford</i>	~2028	—	—	Under construction	<a href="#">[11][87][12]</a>

## List of aircraft carriers of the United States Navy

Hull no.	Name	Image	Class	Commissi oned	Decommi ssioned	Service life	Status	Refs.
CVN-81	<a href="#">Doris Miller</a>		<i>Gerald R. Ford</i>	~2032	—	—	Under construction	<a href="#">[11]</a> <a href="#">[88]</a> <a href="#">[89]</a>
CVN-82	<a href="#">tba</a>		<i>Gerald R. Ford</i>	~2034	—	—	Ordered	<a href="#">[11]</a>

### Keys

-  ships currently out of service
-  ships cancelled prior to completion
-  ships currently in active service
-  ships currently under construction
-  ships currently on order



## Chinese Aircraft Carriers



Since the 1970s, China's [People's Liberation Army Navy](#) (PLAN) has had ambitions to develop and operate [aircraft carriers](#), and since 1985 has acquired four retired aircraft carriers for study; namely, the British-built Australian [HMAS Melbourne](#) and the ex-Soviet carriers [Minsk](#), [Kiev](#) and [Varyag](#). The *Varyag* later underwent an extensive refit to be converted into the *Liaoning*, China's first operational aircraft carrier, which also served as a basis for China's subsequent design iterations. As of 2018, the PLAN has two combat-ready aircraft carriers, the [Liaoning](#) and [Shandong](#), with the third under construction.<sup>[1]</sup> It is projected that China may possess five or six aircraft carriers by the 2030s.



In mid-2007, Chinese domestic sources revealed that China had purchased a total of four sets of aircraft carrier landing systems from Russia and this was confirmed by Russian manufacturers. However,

experts disagreed on the usage of these systems: while some have claimed that it is a clear evidence of the construction of an aircraft carrier, others claim these systems are used to train pilots for a future ship. In August 2008, Huang Qiang, the speaker of the [Commission of Science, Technology and Industry for National Defense](#) announced to the public at a news conference that China had mastered all of the technologies for an aircraft carrier, and would build aircraft carriers in the future when the time was deemed right.<sup>[citation needed]</sup> Reports initially claimed that up to two carriers based on the *Varyag* would be started by 2015.

According to the [Nippon News Network](#) (NNN), research and development on the planned carriers is being carried out at a military research facility in [Wuhan](#). NNN states that the actual carriers will be constructed at [Jiangnan Shipyard](#) in [Shanghai](#). *Kanwa Intelligence Review* reports that the second carrier to be constructed will likely be assigned to [Qingdao](#).

According to a February 2011 report in [The Daily Telegraph](#), the Chinese military has constructed a concrete aircraft carrier flight deck to use for training carrier pilots and carrier operations personnel. The deck was constructed on top of a government building near Wuhan (Wuhan Technical College of Communication campus next to Huangjiahu). On 7 June 2011, [People's Liberation Army](#) Chief of the General Staff [Chen Bingde](#) confirmed that China was constructing its own aircraft carrier. He stated he would provide no further details until it was complete.

## **Development of carrier-based aircraft**

China initially intended to acquire Russian [Sukhoi Su-33 carrier-based aircraft](#) to be operated from its aircraft carriers.<sup>[46]</sup> However, China later developed the [Shenyang J-15](#) as a derivative of the Su-33, featuring Chinese technology and avionics from the [J-11B](#) program. On 25 November 2012, it was announced that at least two Shenyang J-15s had successfully landed on *Liaoning*. The pilot credited with having achieved the first landing was Dai Mingmeng. According to Chinese media reports, the J-15 cannot take off from *Liaoning* with a full fuel and ammunition load, being unable to get off the carrier's ski jump-ramp if the payload exceeds 12 tonnes (26,000 lb).

The [Shenyang FC-31](#) is an in-development medium-sized fifth-generation stealth fighter that may in future be adopted for carrier use.<sup>[51]</sup> The [South China Morning Post](#) reported on 6 July 2018 that China is developing an upgraded variant of the FC-31 as an alternate carrier operational jet.

## List of carriers

Hull number	Name	Class	Builder	Launched	Commissioned	Home port	Status
16	<a href="#"><i>Liaoning</i></a>	<a href="#">Type 001</a>	<a href="#">Mykolaiv Shipyard</a> (Hull) <a href="#">Dalian Shipyard</a> (Refit)	December 1988	September 2012 <sup>[53]</sup>	<a href="#">Jianggezhuang Naval Base</a> <sup>[54]</sup>	Active
17	<a href="#"><i>Shandong</i></a>	<a href="#">Type 002</a>	Dalian Shipyard	April 2017	December 2019 <sup>[55]</sup>	<a href="#">Yulin Naval Base</a>	Active
18	<i>Tbd</i>	<a href="#">Type 003</a>	<a href="#">Jiangnan Shipyard</a>	2022 (estimated)	2024 (estimated)		Under construction <sup>[56]</sup>





## Australian Aircraft Carrier



Light aircraft carrier operated by the Royal Australian Navy (RAN) from 1955 until 1982, and was the third and final conventional aircraft carrier to serve in the RAN. *Melbourne* was the only Commonwealth naval vessel to sink two friendly warships in peacetime collisions.

*Melbourne* was laid down for the Royal Navy as the lead ship of the *Majestic* class in April 1943, and was launched as **HMS *Majestic* (R77)** in February 1945. At the end of the Second World War, work on the ship was suspended until she was purchased by the RAN in 1947. At the time of purchase, it was decided to incorporate new aircraft carrier technologies into the design, making *Melbourne* the third ship to be constructed with an angled flight deck. Delays in construction and integrating the enhancements meant that the carrier was not commissioned until 1955.

## **Taking Naval Warfare to the next level through Artificial Intelligence**

Navies the world over in all advanced countries are carrying out extensive research and with the help of modern scientific advancements the combat system in the deep waters has taken a sea change.

The aircraft carriers also are well equipped to carry out anti-submarine warfare with the help of artificial intelligence. They move in a fleet of various types of vessels, warships and aircraft carrier with fighter bombers.





With BlueScan®, Thales takes collaborative Anti-Submarine Warfare to the next level thanks to Big Data and Artificial Intelligence.

Navies around the world need to perform a variety of missions from Maritime Security Operations in territorial waters to Power Projection including interventions on external theatres of operations, and from coastal environments to the deep sea. They are facing growing and sometimes unexpected threats and challenges, and Anti-Submarine Warfare (ASW) is especially resurging as a key discipline for the 21st century to ensure Navies effectiveness and safety at sea. As ASW missions are crucial to the ability of naval forces to make the right choices at decisive moments, Navies are clear about what they need: a comprehensive, real-time picture of ever-increasingly complex tactical



underwater situations that enables true collaboration – and the ability to distil actionable information from the huge data volumes generated by today's sensors.



With scientific advancement in the modern war technologies, the ships and other equipment are also being built to meet the needs of present day electronic warfare with advanced intelligence system including artificial intelligence.

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**Best Regards**

**Dr. Joy Banerjee,**

**An Alumnus of IIT (KGP), Arthur D. Little Boston, USA, Ex-World Bank, USA**

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