THE AVIATION MAGAZINE

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May 2015 Special Supplementary Edition
Volume 6, Issue 4

NAVAL AVIATION ISSUE

- Commissioning of USS America (LHA 6)
- From the deck of USS Carl Vinson aircraft carrier
- Blue Angels for 2015
- US Navy TAC Demo
- USMC TAC Demo

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THE AVIATION MAGAZINE

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May 2015 Volume 6, Issue 4 Special Edition

Featuring our NAVAL AVIATION edition

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Cover: F/A-18E Super Hornet landing on the USS Carl Vinson (CVN 70) photo by Mathias Leischner

Index page: Flightdeck of the USS Carl Vinson (CVN 70) photo by Ralf Peter Walter

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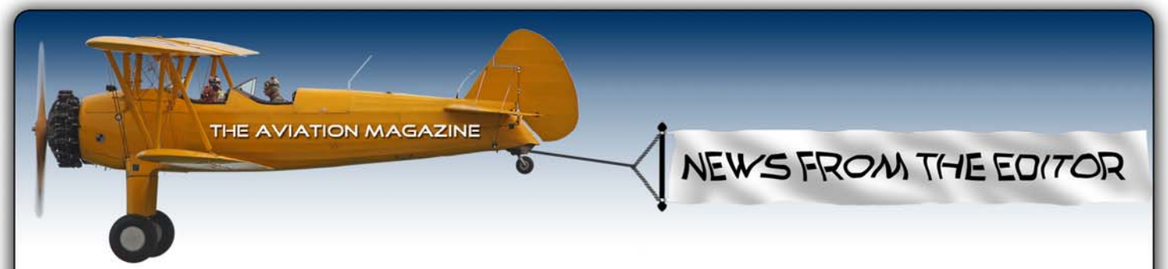


NEWS FROM THE EDITOR

This is our first special supplementary edition featuring a specific topic: Naval Aviation.

When most people think of the navy, they conjure an image of the classic man-o-war battleships from the 16th century or of the more modern dreadnaughts from the early 20th century when the navy ruled. A lot has changed, especially during WWII and the subsequent years after that. Instead of heavy battle ships the navies of the world focused more on smaller and quicker cruisers, destroyers, and to show their might on aircraft carriers.

Every major power has an aircraft carrier these days, but the US Navy not only has the biggest but the largest quantity in its fleet, and by this fact also makes it most powerful one.

In this special issue THE AVIATION MAGAZINE is featuring the USS America LHA-6, the latest amphibious assault ship in the US Navy's fleet, which is essentially a smaller aircraft carrier carrying part of a US Marines expeditionary force into battle and putting them ashore with MV-22 Osprey tilt-rotor aircraft and helicopters supported by the AV-8B Harrier and eventually by the F-35B Lightning II aircraft and helicopter gunships, and the USS Carl Vinson CVN-70 which is a Nimitz class supercarrier in action in the Persian Gulf area.

The images taken aboard USS Carl Vinson represent the typical day-to-day action that one can experience being on the flight deck; bringing our readers "the closest as you can without being enlisted" visual experience!

In addition, we feature the 2015 members of the US Navy's Blue Angels, one of the most famous and best known demonstration teams in the world with a brief history and images from the past as well as current images.

The US Navy and Marine Corps will demonstrate the tactical capabilities of the F/A-18 Hornet and Super Hornet, the AV-8B Harrier II and the MV-22 Osprey at a limited number of air shows this year. We've already seen them in action at several air shows and give you previews of the action in our two TACDemo articles.

With this special issue by THE AVIATION MAGAZINE we wish to honour all naval aviators worldwide.

USS America (LHA 6) Commissioning
Pier 30/32, San Francisco, CA

Article by Norman A. Graf with photography as noted

USS America, the newest and most technologically advanced amphibious assault ship in the fleet, was commissioned during a formal ceremony on October 11, 2014 at San Francisco's Pier 30/32 during the city's annual Fleet Week.

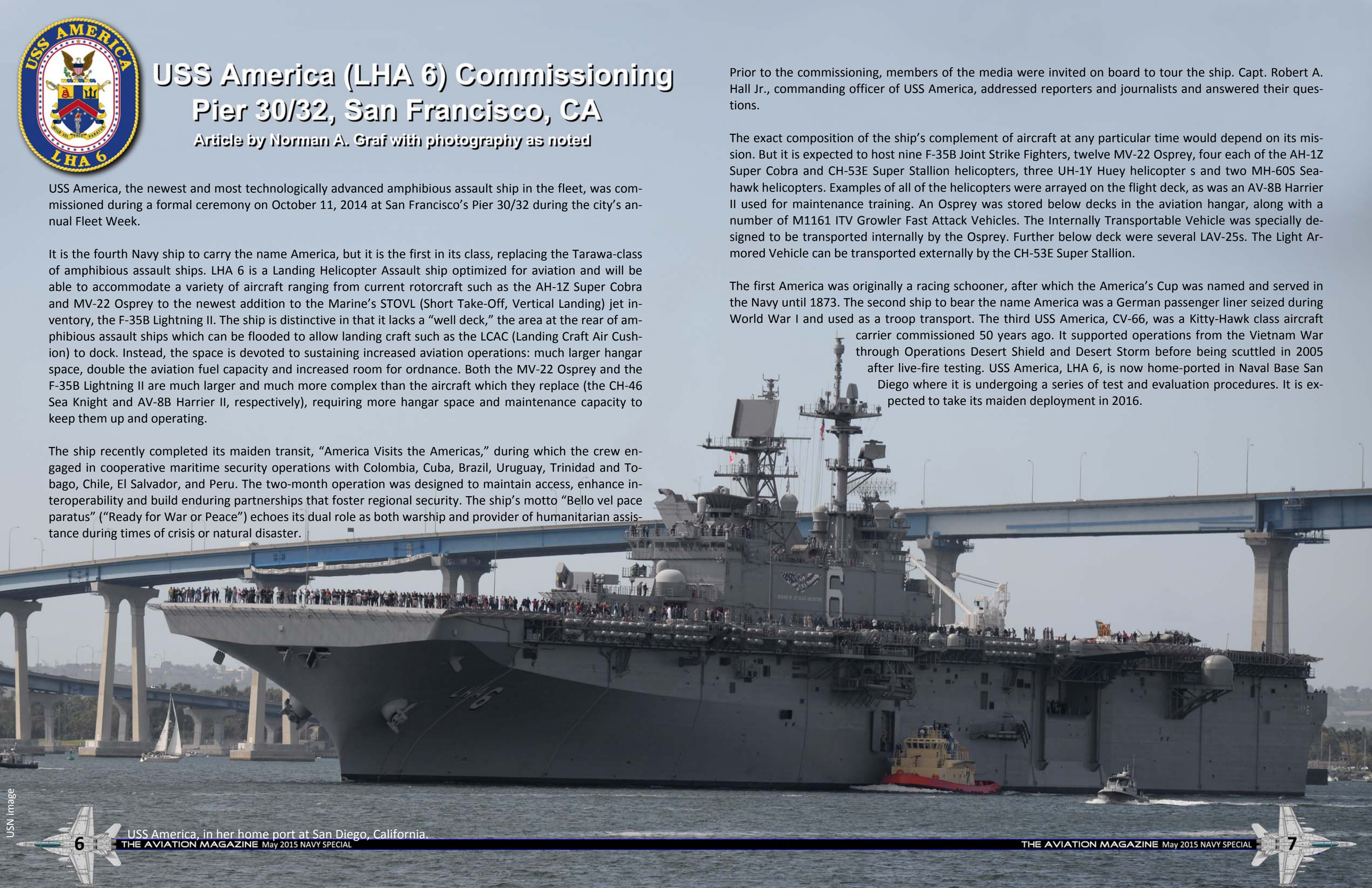
It is the fourth Navy ship to carry the name America, but it is the first in its class, replacing the Tarawa-class of amphibious assault ships. LHA 6 is a Landing Helicopter Assault ship optimized for aviation and will be able to accommodate a variety of aircraft ranging from current rotorcraft such as the AH-1Z Super Cobra and MV-22 Osprey to the newest addition to the Marine's STOVL (Short Take-Off, Vertical Landing) jet inventory, the F-35B Lightning II. The ship is distinctive in that it lacks a "well deck," the area at the rear of amphibious assault ships which can be flooded to allow landing craft such as the LCAC (Landing Craft Air Cushion) to dock. Instead, the space is devoted to sustaining increased aviation operations: much larger hangar space, double the aviation fuel capacity and increased room for ordnance. Both the MV-22 Osprey and the F-35B Lightning II are much larger and much more complex than the aircraft which they replace (the CH-46 Sea Knight and AV-8B Harrier II, respectively), requiring more hangar space and maintenance capacity to keep them up and operating.

The ship recently completed its maiden transit, "America Visits the Americas," during which the crew engaged in cooperative maritime security operations with Colombia, Cuba, Brazil, Uruguay, Trinidad and Tobago, Chile, El Salvador, and Peru. The two-month operation was designed to maintain access, enhance interoperability and build enduring partnerships that foster regional security. The ship's motto "Bello vel pace paratus" ("Ready for War or Peace") echoes its dual role as both warship and provider of humanitarian assistance during times of crisis or natural disaster.

Prior to the commissioning, members of the media were invited on board to tour the ship. Capt. Robert A. Hall Jr., commanding officer of USS America, addressed reporters and journalists and answered their questions.

The exact composition of the ship's complement of aircraft at any particular time would depend on its mission. But it is expected to host nine F-35B Joint Strike Fighters, twelve MV-22 Osprey, four each of the AH-1Z Super Cobra and CH-53E Super Stallion helicopters, three UH-1Y Huey helicopter s and two MH-60S Seahawk helicopters. Examples of all of the helicopters were arrayed on the flight deck, as was an AV-8B Harrier II used for maintenance training. An Osprey was stored below decks in the aviation hangar, along with a number of M1161 ITV Growler Fast Attack Vehicles. The Internally Transportable Vehicle was specially designed to be transported internally by the Osprey. Further below deck were several LAV-25s. The Light Armored Vehicle can be transported externally by the CH-53E Super Stallion.

The first America was originally a racing schooner, after which the America's Cup was named and served in the Navy until 1873. The second ship to bear the name America was a German passenger liner seized during World War I and used as a troop transport. The third USS America, CV-66, was a Kitty-Hawk class aircraft carrier commissioned 50 years ago. It supported operations from the Vietnam War through Operations Desert Shield and Desert Storm before being scuttled in 2005 after live-fire testing. USS America, LHA 6, is now home-ported in Naval Base San Diego where it is undergoing a series of test and evaluation procedures. It is expected to take its maiden deployment in 2016.



USN image

USS America, in her home port at San Diego, California.

Captain Robert A. Hall Jr.
Commanding officer of USS America

CH-53E Super Stallion, UH-1Y Huey and two MH-60S Seahawk helicopters on the flight deck, above. USS America off Rio de Janeiro in August 2014 during "America Visits the Americas" main image, with two MH-60S Seahawk helicopters and an MV-22B Osprey on the flight deck.

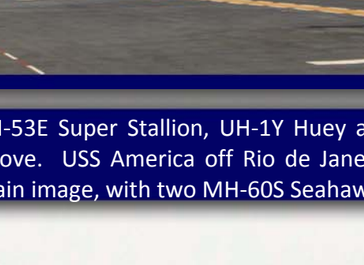
All images accept as noted Norman A. Graf

USS America's Bell and Wheel

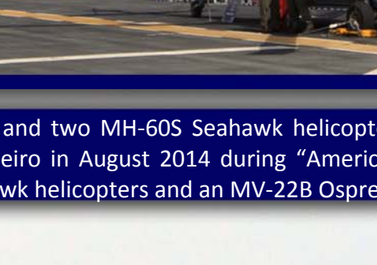
USS America's Officers

"Plank Owners"

120mm Mortar & M1161 ITV Growler



MV 22 Osprey & M1161 ITV Growler



LAV 25 Light Armored Vehicle

USN image

- AH-1Z Super Cobra to the top left and right, on the flight deck of USS America.
- AV-8B Harrier II used for maintenance training, top middle.
- The public is waiting to aboard the amphibious assault carrier at Pier 30/32 in San Francisco.

All images by unless noted © 2014 Norman A. Graf

USN image

© 2014 Norman A. Graf

USN image

CH-53E Super Stallion, above and the MV-22 Osprey below the deck on display in San Francisco.

In late February 2015 the amphibious assault ship USS America (LHA 6) was conducting maritime training operations off the coast of California. AV-8B Harrier is about to take off from the deck, bottom mid and right, while another one was landing from the Marine Attack Squadron (VMA) 311, stationed at MCAS Yuma, right bottom.

© 2014 Norman A. Graf

USN image

USN image

AIRCRAFT CARRIER

Report and photography by Ralf Peter Walter and Mathias Leischner
with additional notes by the Editor and photography as noted

There are five aircraft carrier museums one can visit in the USA:

- USS YORKTOWN, CV-10, MUSEUM, CHARLESTON, SC
- USS INTREPID, CV-11, MUSEUM, NEW YORK, NY
- USS HORNET, CV-12, MUSEUM, ALAMEDA, CA
- USS LEXINGTON, CV-16, MUSEUM, CORPUS CHRISTI, TX
- USS MIDWAY, CV-41, MUSEUM, SAN DIEGO, CA

But to get the feel of what is truly like being on one, one must be on an operational one. Unless being enlisted and assigned to one, is a very rare and exciting especially if one is a devoted aircraft enthusiast and a photographer at the same time.

We have the rare privilege to share with you a photo report from the USS Carl Vinson CVN 70, by two photographers who just did that, Ralf Peter Walter and Mathias Leischner.

USS Carl Vinson in Support of Operation Inherent Resolve

The US aircraft carrier USS Carl Vinson (CVN 70) left its home port San Diego on August 22, 2014. Embarked on it is Carrier Air Wing (CVW) 17 with nine squadrons and a total of 63 aircraft. The Carl Vinson is joined by the four destroyers USS Bunker Hill (CG 52), USS Dewey (DDG 105), USS Grudley (DDG 101) and USS Sterett (DDG 104), all together forming the Carl Vinson Carrier Strike Group 1 (CSG). After participating in an undersea warfare exercise (USWEX) off the coast of Hawaii and in "Valiant Shield 2014" - an US only exercise involving two aircraft carriers and a total of 19 ships and more than 200 aircraft - the CSG reported for duty in the US 5th Fleet area of responsibility (AOR) on October 15th, 2014. The Carl Vinson relieved USS George H. W. Bush (CVN 77) and CVW 8 at conducting air operations in support of operation ***Inherent Resolve.*** Aircraft of CVW 17 perform air strikes in Syria and Iraq and support maritime and theater security operations in the 5th Fleet area of operation.

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Inherent Resolve is an operation of the coalition of partner nations united in their fight against the Islamic State in Iraq and the Levant (ISIL). The operation's goal is to eliminate the ISIL terrorist group and the threat they pose to Iraq, Syria, the region, and the wider international community. The destruction of ISIL targets in Syria and Iraq further limits the terrorist group's ability to project terror and conduct operations.

Coalition nations conducting airstrikes in Iraq include Australia, Belgium, Canada, Denmark, France, the Netherlands, the United Kingdom and the United States. Coalition nations conducting airstrikes in Syria include Bahrain, Jordan, Saudi Arabia, the United Arab Emirates and the United States.

The USS Carl Vinson is scheduled to be in the 5th Fleet AOR for six months which would mean staying in the Persian Gulf area until April to be relieved by the USS Theodore Roosevelt (CVN-71) It then will return back home to San Diego at the end of an almost ten months tour, making it one of the longest US Navy carrier deployments in the last 30 years.

We would like to thank Captain Karl Thomas, Commanding Officer, LCDR Kyle A. Raines, Chief of Public Affairs, all the sailors, aviators and squadron crew members aboard USS Carl Vinson (CCVN70) for their hospitality, and LT Joe W. Hontz, Public Affairs COMNAVCENT.

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A CLOSER LOOK

USS CARL VINSON
VIS PER MARE
CVN 70

USN image

HISTORY

The USS Carl Vinson (CVN-70) is the third United States Navy Nimitz class supercarrier and is named after Carl Vinson, a Congressman from Georgia, in recognition of his contributions to the US Navy.

USS Carl Vinson was commissioned on 13 March 1982 at Newport News, Virginia, with Captain Richard Martin commanding. Since October 2009 Carl Vinson is the flagship of the Carrier Strike Group 1, based in San Diego. The ship, currently under the command of Captain Karl O. Thomas.

The USS Carl Vinson's propulsion is provided by two Westinghouse A4W nuclear reactors and is capable of speeds of 30+ knots (35+ mph), displaces 101,300 long tons. She is 1,092 ft (332.8 m) long and 252 ft (76.8 m) wide. The angled flight deck is 779.8 ft (237.6 m) long. There are 4 catapults to launch aircraft. The size of the Air Wing is 63 aircraft. The ship crews is approximately 2,800 in addition of the 2000 Air Wing crew.

USN image

CARRIER AIR WING (CVW) 17

CVW-17 is presently composed of the following squadrons:

VFA-22 "Redcocks" - F/A-18F Super Hornet
VFA-81 "Sunliners" - F/A-18E Super Hornet
VFA-113 "Stingers" - F/A-18C Hornet
VFA-94 "Mighty Shrikes" - F/A-18C Hornet
VAQ-139 "Cougars" - EA-18G Growler
VAW-116 "Sun Kings" - E-2C Hawkeye
HSC-15 "Red Lions" - MH-60S Seahawk
HSM-73 "Battlecats" - MH-60R Seahawk
VRC-30 "Providers" - C-2A COD

The aircraft

HORNET F/A-18C

All-weather fighter and attack aircraft. The single-seat F/A-18 Hornet is the US Navy's first strike-fighter. It was designed for traditional strike applications such as interdiction and close air support without compromising its fighter capabilities. With its excellent fighter and self-defense capabilities, the F/A-18 at the same time increases strike mission survivability.

PRIMARY ROLE
Multi-role attack and fighter aircraft

CREW
One person

SPECIFICATIONS
Length: 56 feet
Height: 15 feet, 4 inches
Wingspan: 40 feet, 5 inches
Weight: 51,900 pounds
Airspeed: Mach 1.7+
Ceiling: 50,000+ feet

Propulsion: Two F404-GE-402 enhanced performance turbofan engines.
Range: Combat 1,089 nautical miles (1,252 miles) clean
Ferry: 1,546 nautical miles (1,777.9 miles)

SUPER HORNET
F/A-18E/F

Built on the Navy's first strike fighter, the F/A-18 Hornet, today's F/A-18E/F Super Hornet is an attack aircraft as well as a fighter through selected use of external equipment and advanced networking capabilities to accomplish specific missions. This "force multiplier" capability gives the operational commander more flexibility in employing tactical aircraft in a rapidly changing battle scenario. In its fighter mode, it serves as escort and fleet air defense. In its attack mode, it provides force projection, interdiction, and close and deep air support.

PRIMARY ROLE
Multi-role attack and fighter aircraft

CREW
F/A 18E - One
F/A 18F - Two

SPECIFICATIONS
Overall Length: 60 feet, 3 inches
Wingspan: 44 feet, 9 inches
Weight: 66,000 pounds

Airspeed: Mach 1.7+
Ceiling: 50,000+ feet
Range: Combat 1,275 nautical miles (1,467 miles) clean

HAWKEYE
E-2C

The E-2C Hawkeye is the Navy's all-weather, carrier-based, tactical battle management airborne early warning and command and control aircraft. It is a twin engine, five crewmember, high-wing turboprop aircraft with a 24-foot diameter radar rotodome attached to the upper fuselage. The Hawkeye provides tactical battle management, command, control and communications, and airborne early warning functions for the Carrier Strike Group and joint force commander in all weather, day or night.

PRIMARY ROLE
Airborne Command and Control

CREW
Five people

SPECIFICATIONS
Length: 57 feet, 9 inches
Height: 18 feet, 4 inches
Wingspan: 80 feet, 6 inches
Weight: 42,000 pounds
Airspeed: 320 knots

Ceiling: 37,000+ feet
Propulsion: Two Rolls Royce T-56-A-427 turboprop engines
Range: Combat 1,500 nautical miles

GROWLER
EA-18G

The EA-18G Growler is a variant of the combat-proven FA-18F Super Hornet Block II, and will fly the airborne electronic attack mission. The EA-18G combines the capability of the combat-proven Super Hornet with the latest AEA avionics suite evolved from the Improved Capability III (ICAP III) system. The EA-18G's vast array of sensors and weapons provides the warfighter with a lethal and survivable weapon system to counter current and emerging threats.

PRIMARY ROLE
Electrical attacker

CREW
Two people

SPECIFICATIONS
Length: 60 feet, 1.25 inches
Height: 16 feet
Wingspan: 44 feet, 8.5 inches
Empty Weight: 33,094 lbs.
Loaded Weight: 48,000 lbs.

Maximum takeoff weight: 66,000 pounds
Powerplant: 2x General Electric F414-GE-400 turbofans
Dry thrust: 14,000 lbf each

SEA HAWK
MH-60R/S

Two variants of the MH-60 Seahawk provide next generation, multi-mission Sea Control capabilities to Carrier Strike Groups, Amphibious Readiness Groups, Surface Action Groups and Littoral Combat Ships.
The MH-60R is the sole organic air Anti-submarine Warfare (ASW) asset in the CSG and a significant contributor to full spectrum Anti-surface Warfare and maritime Electronic Warfare mission areas.
The MH-60S is responsible for Combat Logistics, Naval Special Warfare, Anti-Surface Warfare, Airborne Mine Countermeasures and Combat Search and Rescue mission areas.

PRIMARY ROLE
Multi-mission Sea Control

CREW
Three or four people

SPECIFICATIONS
Length: 64 feet, 10 inches
Height: 17 feet
Weight:
empty - 14,430 pounds
max gross - 23,500 pounds
Airspeed: 180 knots

Ceiling: 13,000 feet
Propulsion: 2-GE T700-GE-401
Range: 245 nautical miles

GREYHOUND
C-2A

The C-2A Greyhound is a high wing, twin-engine Carrier Onboard Delivery (COD) aircraft. It can transport cargo between ship and shore in a matter of hours. The C-2 has a common wing with the Hawkeye but has a widened fuselage and a rear loading ramp. The C-2 fleet provides rapid airborne logistics capability to the carrier strike force across a full range of sea basing military operations.

PRIMARY ROLE
Carrier On-Board Delivery (COD) aircraft

SPECIFICATIONS
Length: 56 feet, 10 inches
Height: 17 feet, 2 inches
Wingspan: 80 feet, 7 inches
Weight: 57,500 pounds
Airspeed: Cruise - 260 knots
Maximum approx. 343 knots

Propulsion: Two Allison T56-A-425 turbopop engines, 4,600 shaft horsepower each
Ceiling: 30,000 feet

C-2A Greyhound landing...

To get on the USS Carl Vinson while deployed in the Persian Gulf, one has to get a lift from the C-2A. This is one wild ride, one must wear a helmet, hearing protection, goggles, and a life jacket. Sickness bags recommended too, and it is a rough landing to say the least as the tailhook catches the arrester cable, the C-2A decelerates very quickly with a force of negative of somewhere between 2-3 Gs. As one is seated facing to the rear this actually becomes a positive force, the occupant is pressed into their seat.

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C-2A Greyhound - After landing, the wings are folded back quickly to save space...

F/A-18E Super Hornet

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F/A-18F Super Hornet

The current look of "100" below, and the former paint scheme top right .

USN image

© 2015 Ralf P. Walter

F/A-18F Super Hornet

0 to 140 knots (161 mph, 261 kph) in 2 seconds: must be a real blast! The four C-13-1 steam catapults incorporated into the flight deck can hurl an aircraft aloft in about 150 feet. There are four catapults, onboard the Nimitz class ships, which can launch a plane every 25 seconds, or simultaneously on the two flight decks forward and angled. With the blast deflector shields raised up the "Shooter" (catapult officer) inside the catapult control pod is about to launch "100".

© 2015 Ralf P. Walter

“110” F/A-18F Super Hornet about to launch

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F/A-18F Super Hornets landing...

© 2015 Mathias Leischner

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F/A-18C Hornet

© 2015 Mathias Leischner

F/A-18C Hornet

F/A-18C Hornet

Pilot of "406"

F/A-18C Hornet

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405
405
405

CO
NA
VFA-94
401
401

EA-18G Growler

EA-18G Growler

© 2015 Ralf P. Walter

E-2C Hawkeye

"600" of the Sun Kings about to catch #3 cable on the left and is ready for launching by the catapult on the forward flight deck.

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MH-60S Sea Hawk

MH-60R Sea Hawk

© 2015 Ralf P. Walter

THE CREW

Some of the many squadron crew members who through their tireless efforts make the flights possible 24 hours a day. **We thank YOU all!**

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USS CARL VINSON
VIS PER MARE
CVN 70
THANK YOU!
USN image
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PROVIDERS
VRC-30
STINGERS
STRKFITRON-113
SUNLINERS
VFA-81
VAQ-139
VAW-116
BATTLE CATS
HSM-73
HELSEACOMBATRON FIFTEEN
MIGHTY SHRIKES
F/A 18C
VFA-94
VFA-22
F/A-18E
VFA-22

On March 9, 2015, a F/A-18E Super Hornet from VFA 81 Sunliners refuels two French Super Étendard Marine and one Rafale Marine aircraft from French aircraft carrier Charles de Gaulle in the vicinity of U.S. aircraft carrier USS Carl Vinson (CVN 70) in the Arabian Gulf.

A Rafale Marine aircraft from Squadron 11F of the French navy nuclear-powered aircraft carrier Charles de Gaulle (R91) lands and is catapulted off during carrier qualifications aboard the U.S. Navy nuclear powered aircraft carrier USS Carl Vinson (CVN 70) in the Arabian Gulf, March 3, 2015.

All images US Navy

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2015 Blue Angels

Article by the Editor with photography as noted

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#1 Captain Tom Frosch

#2 Lt. Matt Suyderhoud

#3 Lt. Andy Talbott

Over the years we have covered the Blue Angels performing at many air shows. In this Naval Aviation edition we decided to look at the history and of the personnel who make up the 2015 team.

- **A BRIEF HISTORY**

The Blue Angels have been performing since 1946 and that makes them one of the oldest, if not the oldest multi aircraft performing team in the world.

The Blue Angels originally were based at the Naval Air Station (NAS) Jacksonville, Florida. Flying the Grumman F6F Hellcat, they were led by Lt. Cmdr. Roy "Butch" Voris. In August, 1946, the Blue Angels transitioned to the Grumman F8F Bearcat. One year later, the 1947 team, led by Lt. Cmdr. Robert Clarke, introduced the now famous "Diamond Formation." The Blue Angels flew the following aircraft over the years:
Grumman F6F-5 Hellcat - June-August 1946
Grumman F8F-1 Bearcat - August 1946-1949
Grumman F9F-2 Panther - 1949-June 1950 (first jet)
Grumman F9F-5 Panther - 1951-Winter 1954/55
Grumman F9F-8 Cougar - Winter 1954/55-mid-season 1957 (swept-wing)
Grumman F11F-1 Tiger - mid-season 1957-1969 (first supersonic jet)
McDonnell F-4J Phantom II - 1969-December 1974
Douglas A-4F Skyhawk - December 1974-November 1986
McDonnell Douglas (now Boeing) F/A-18A/B Hornet - Since November 1986 and currently the F/A-18C/D models.

In addition to the demonstration aircraft their support aircraft included:
Douglas R4D Sky Train - 1949-1955
Curtiss R5C Commando - 1953
Douglas R5D Skymaster - 1956-1968
Lockheed C-121 Super Constellation - 1969-1973
Lockheed C-130T Hercules - 1970-Present aka "Fat Albert Airlines"
Other aircraft:
SNJ Texan
Chance Vought F7U Cutlass for 1952 as solo aircraft
Lockheed T-33 Shooting Star

The Blue Angels in 1954 relocated to their present home base at NAS Pensacola, Florida. For additional information visit the official web site; http://www.blueangels.navy.mil

Click on covers to download

#4 Lcdr Nate Barton

#5 Lcdr Mark Tedrow

#6 Lt Ryan Chamberlain

#7 Captain Jeff Kuss

Background © 2015 Norman A. Graf, pilots courtesy of the Blue Angels

Then and now...

The current Boeing F/A-18C/D

Chance Vought F7U Cutlass for 1952 as solo aircraft

Background © 2015 Norman A. Graf, other aircraft National Museum of Naval Aviation

F6F-5 Hellcat

F8F-1 Bearcat

F9F-2 Panther

F9F-8 Cougar

F11F-1 Tiger

F-4J Phantom II

A-4F Skyhawk

The No.7 Boeing F/A-18D is normally used for VIP rides to the left and above, while the "Boss" Captain Tom Frosch salutes the photographers at El Centro Photocall.

CAPT Tom Frosch

All images © 2015 Norman A. Graf

2015 Blue Angels

THE BEST OF THE BEST

rtesy of the Blue Angels

2015 Blue Angels

El Centro Air Show, California

© 2015 Norman A. Graf

Tuscaloosa Regional Air Show
Tuscaloosa, Alabama

© 2015 Clifford Martin

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Fat Albert Airlines

DIGITAL FILM CS-5 PROCESS

PILOTS:2015

Major Dusty Cook, USMC

Major Mark Hamilton, USMC

Captain Katie Higgins, USMC

All pilot images courtesy of Blue Angels

United States Marine Corps C-130T Hercules "The Fat Albert Airlines" known as "Fat Albert" actually is more than just a support aircraft carrying spare parts, equipment, and to carry support personnel between shows. In fact it is also a performer at air shows and a platform for media rides for a few lucky reporters.

From 1975 to 2009 Fat Albert nicknamed "Bert" at selected air shows used Jet Assisted Take Off (JATO) eight rocket boosters (four on each side) to show the short take-off capabilities just prior to the main event which featured the Blue Angels Jet Team.

Over the years I had two opportunities to receive this much coveted ride. Luckily, my first one was with the JATO rocket booster attached, at one of the last rides with such in 2009, as a passenger in the back. It was a thrilling ride, to say the least with the roar and smoke of the eight JATO rocket booster lifting off at a 45 degree incline.

My second ride was a more memorable one: being inside the cockpit, although it was without the JATO, thus the ascent was not as dramatic, but certainly had a much better view of the surroundings and gave me a better understanding how Fat Albert is flown.

"Fat Albert Airlines" flies with an all-Marine crew of three officers, who must be aircraft commander qualified with at least 1,200 flight hours, and five enlisted personnel. For 2015 one of the pilots is a female, Captain Katie Higgins, for the first time.

- Fat Albert with JATO in 2009, below
- Fat Albert in 2015, on the right

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From the cockpit Hitting ZERO-G The crew in 2015 and after landing waving to the crowds

C-130T Fat Albert
Over Alcatraz Island, CA, in 2014

© 2015 Norman A. Graf

Images courtesy of Blue Angels

The group photo of the Officers of the 2015 Blue Angels

Left to right back row: LT Amber Lynn Daniel, Public Affairs Officer, LT Phil Harper, Administrative Officer, LCDR Declan Hartney, Maintenance Officer, Major Mark Hamilton, C-130 Pilot, Commander Bob Flynn, Executive Officer, Major Dusty Cook, C-130 Pilot, Captain Katie Higgins, C-130 Pilot, LCDR Joe Schwartz, Flight Surgeon, and LT Greg Bollinger, Supply Officer.

Left to right front row: Captain Corrie Mays, Events Coordinator, LT Ryan Chamberlain, Opposing Solo, LCDR Nate Barton, Slot, Lieutenant Matt Suyderhoud, Right Wing, Captain Tom Frosch, Flight Leader/ Commanding Officer, Lieutenant Andy Talbott, Left Wing, Lieutenant Commander Mark Tedrow, Lead Solo, and Captain Jeff Kuss, Narrator.

NAVY TAC DEMO

Article and photography by Norman A. Graf

After being absent from the air show circuit the last two years due to the budget sequestration process, the Navy's Hornet Tactical Demonstration Teams have returned for the 2015 air show season. The "Tac Demo" team is composed of Fleet Replacement Squadron instructors flying the same aircraft used to train students and the demonstration routine is designed to highlight the mobility, versatility and power of the F/A-18 Hornet and Super Hornet multi-role fighter aircraft. The teams, from VFA-106 "Gladiators" from NAS Oceana and VFA-122 "Flying Eagles" from NAS Lemoore, will perform at over twenty shows across the US and one show in Canada.

See our reviews of the first two Super Hornet demonstrations:

LT Nate "Fonda" Miller (pilot) and the GIB, LT Jason "IADS" Hoch (WSO) of VFA-106 "Gladiators" from NAS Oceana, flew the F/A-18 "Foxtrot" demo at the NAF El Centro Airshow.

F/A –18F Super Hornet VFA-106 | F/A –18F Super Hornet VFA-106 | F/A –18E Super Hornet VFA-122

LT Jarod "Rhianna" Wheeler of VFA-122 "Flying Eagles" from NAS Lemoore flew the F/A-18 "Echo" demo at the LA County Airshow.

More information can be found at their Facebook Page .

Schedule: subject to change

MAY:
9-10 Millville Air Show, Millville, NJ VFA-106 (F)
23-24 Bethpage Air Show, Jones Beach, NY VFA-106 (C)
23-24 Salute to Veterans Air Show, Columbia, MO VFA-122 (E)

JUNE:
20-21 Denton Air Show, Denton, TX VFA-122 (E)
20-21 Dayton Air Show, Dayton, OH VFA-106 (F)

JULY:
3 Dubuque Jaycees Air Show, Dubuque, IA VFA-122 (E)
4 National Cherry Festival Airshow, Traverse City, MI VFA-106 (C)
11-12 Gary South Shore Air Show, Gary, IN VFA-106 (F)
25-26 Milwaukee Air and Water Show, Milwaukee, WI VFA-106 (C)

AUGUST:
8-9 Abbotsford International Air Show, Abbotsford, BC VFA-122 (E)
29-30 NYC Air Show at Coney Island, Brooklyn, NY VFA-106 (F)

SEPTEMBER:
5-7 Cleveland National Air Show, Cleveland, OH VFA-106 (F)
12-13 Wings Over Waukegan, Waukegan, IL VFA-106 (C)
19-20 NAS Oceana Airshow, NAS Oceana, VA VFA-106 (C/F)
26-27 Memphis Air Show, Millington, TN VFA-122 (E)

OCTOBER:
3-4 California Capitol Air Show, Mather, CA VFA-122 (E)
17-18 Wings Over Houston, Houston, TX VFA-122 (E)
24-25 Amigo Air Show, Santa Teresa, NM VFA-122 (E)
31 -1 Nov Stuart Airshow, Stuart, FL VFA-106 (C)

AV-8B Harrier VMA-311 At LA County Airshow MV-22B Osprey from VMM-263 at the Tuscaloosa Air Show.

US MARINE CORPS TAC DEMO

Article by Norman A. Graf with photography as noted

The U.S. Marine Corps' AV-8B Harrier and the MV-22B Osprey tactical flight demonstrations are some of the most sought-after aerial demonstrations offered by the U.S. military. Demonstrations are performed by the same aircraft and Marines who train and deploy in support of real-world contingencies. Headquarters Marine Corps selects only a handful of events to receive these coveted demonstrations during the air show season.

See our reviews of the first two USMC demonstrations:

The AV-8B Harrier from VMA-311 "Tomcats" out of MCAS Yuma, demo at the LA County Airshow.

The MV-22B from MMV -263 "Thunder Chickens" out of MCAS New River, North Carolina demo at Tuscaloosa Air Show.

MV-22B Osprey Schedule:

May 23	Salute to Veterans Air Show, Columbia, MO
Jul 03	Dubuque Air Show & Fireworks, Dubuque, IA
Aug 22	Wings Over Camarillo Air Show, Camarillo, CA
Oct 3	Wings Over North Georgia, Rome, GA

AV-8B Harrier II Schedule:

May 02	Dyess Big Country Airfest, Dyess AFB, TX
Jul 18	Thunder of Niagara 2015 Air Show, Niagara Falls, NY
Jul 25	Fargo AirSho 2015, Fargo, ND
Jul 31	Seafair Airshow, Seattle, WA
Aug 29	New York City Air Show, Coney Island, NY
Sep 05	Cleveland National Air Show, Cleveland, OH

The most up-to-date information can be found at their aerial support web page.

MV-22B VMA-263

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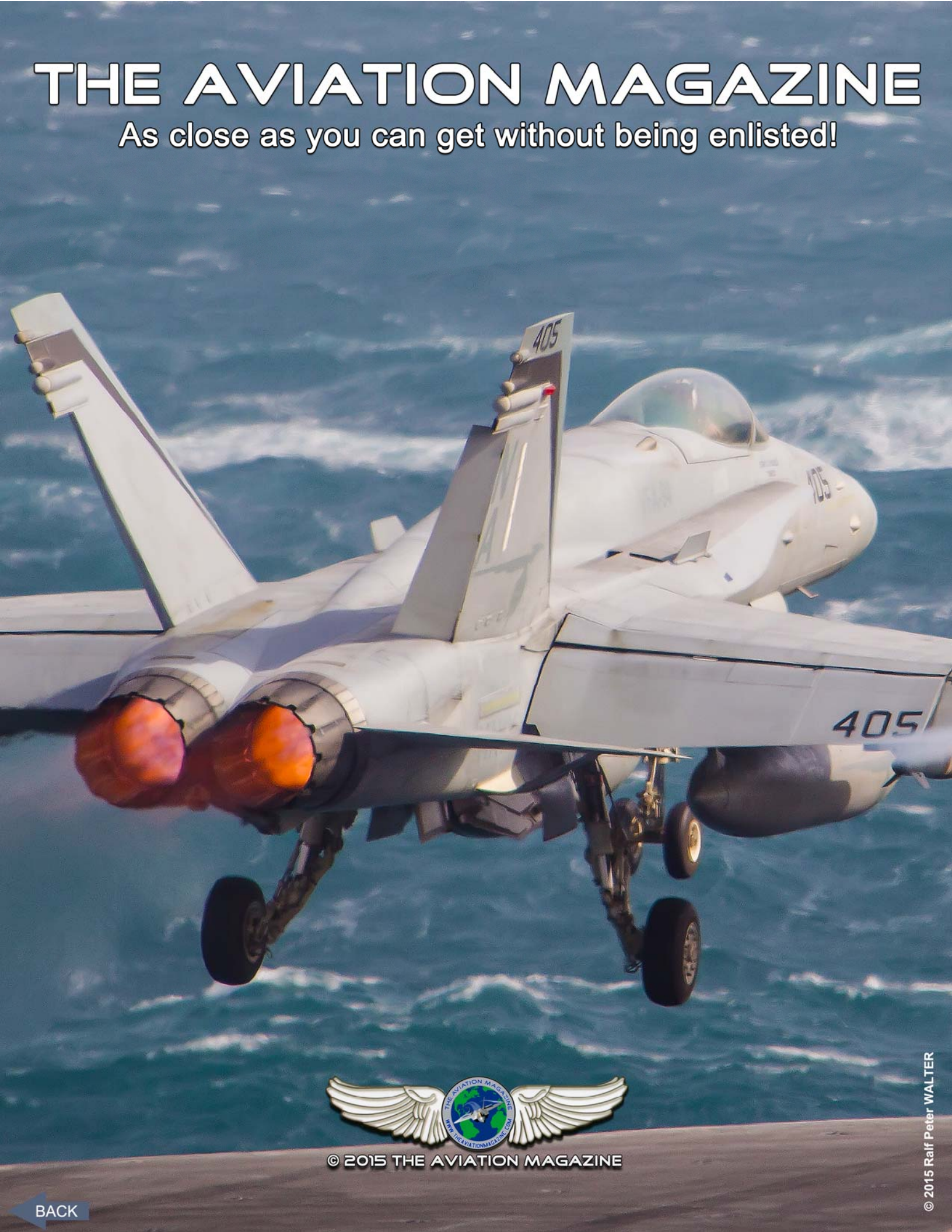

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