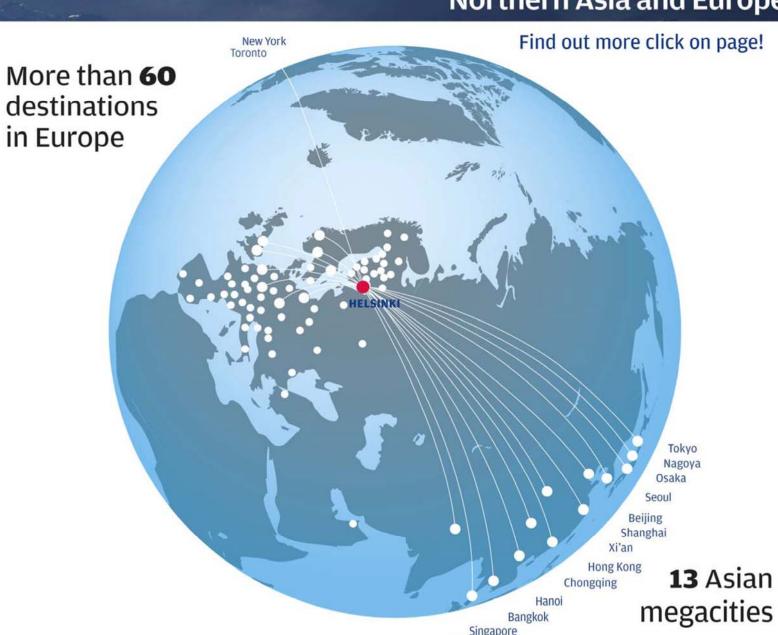
# THE AVIATION MAGAZINE ....

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# THE AVIATION MAGAZINE

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THE AVIATION MAGAZINE is published six times a year, by a Team of Volunteers interested in aviation. We are devoted to cover a wide range of aviation events ranging from air shows, air base visits, military exercises, civilian spotting, pilot and veteran interviews all with exceptional photography. THE AVIATION MAGAZINE is a leader in the emagazine format since 2009, bringing exclusive and fascinating reports to our global aviation enthusiasts digitally.

Please note: we do not accept any unsolicited articles or images for publicaltion.

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Meaning that you can see our magazine issues on your smartphones, and tablets too not just on desktops or laptops.

The 2016 season has not been established as of the publishing date of this issue. Therefore, we are highlighting several air shows, air races and even one of the largest NATO exercise from the last quarter of 2015, from Canada, USA, France, Spain to Dubai. Hopefully by our March issue we should have a good idea as to which air shows and event we will be covering in 2016. In our next issue we will publish our much anticipated Annual Best Air Show Award too!

We look forward to the 2016 air show season with a lot of enthusiasm, and to bringing you the "Best for Free" ® e-based aviation magazine as we take you to aviation events "As close as you can get without being at an air show!" Tell all your friends to like us on Facebook, follow us for the latest reviews and news on Twitter and to subscribe on Joomag to automatically receive the latest issue of THE AVIATION MAGAZINE.



THE AVIATION MAGAZINE JANUARY - FEBRUARY 201



And the excitement continues! After last year's incredible photo-finish between Bill "Tiger" Destefani in Strega and Steven Hinton in Voodoo during a heat race, and Thom Richard's disqualification flying Heavy Metal in the Gold Medal final race, many thought it would be years before we'd see anything near as thrilling. When "Tiger" retired, Heavy Metal was heavily damaged by fire on its way to the races, and Rare Bear declared a Mayday landing on Monday those fears seemed to be confirmed. But as veteran air race fans can tell you, anything can happen and "it ain't over until the planes are on the ground and a clean race has been announced."

The 52nd annual National Championship Air Races took place at Stead Field from September 16 to 20 this year. The weather was characterized by clear skies and mild temperatures: perfect conditions for racing. 116 planes qualified in the six classes and the action was pretty much non-stop all week. When not flying, the aircraft were being fine-tuned or overhauled in the pits. The crews often worked late into the night to recover from damage or to coax the last little bit of performance out of the airframes and engines. Racing began around 0800 and didn't finish until about 1600. Interspersed with the racing in the afternoon were the air show performances, which we highlight in another review.

Attendance continues to grow, both in numbers of fans and numbers of racers. Over 150,000 spectators attended this year's event. The Sport class attracted 37 entrants and featured some intense duels in the four medal races (Gold, Silver, Bronze and Medallion). The Jet class qualified a record 17 aircraft, dominated by eleven L-39s. The field also included an L-139, three L-29 Delfins, and a TS-11 Iskra. But it was a DH 115 Vampire jet, Vampire, piloted by Pete Zaccagnino, which took the gold. Steve Senegal, in Endeavor, dominated the sixteen plane Formula One field. And even the sometimes staid T-6 class saw some spirited action this year, with Dennis Buehn, in Midnight Miss III, taking the gold.

But it is the Unlimited class which attracts the most attention and which this year created, once again, the most excitement. Thirteen highly modified warbirds qualified to race and no fewer than seven P-51D Mustangs showed up. Unfortunately Heavy Metal had been damaged by fire during a refueling stop on its way to Reno and did not participate. Completing the impressive lineup were four Sea Furies, a Yak-11, and perennial fan favorite Rare Bear. The F8F Bearcat captured pole position with a qualification time of 480.644 mph, but also showed signs of its temperamental engine when it called for a Mayday landing on Monday. But all eyes were on Voodoo and Strega. Six-time champion Steven Hinton was once again piloting Voodoo, while Robert "Hoot" Gibson replaced "Tiger" Destefani in Strega. In the first heat, Rare Bear continued its blistering pace, winning with a speed of 478.479, with Strega and Voodoo coming in second and third, respectively. In Heat 3A "Hoot" poured it on, coming in first with a speed of 484.793 mph, with Hinton once again right behind him. Stewart Dawson, in Rare Bear, held on to third. All the while, Dennis Sanders, in the Sea Fury Dreadnought, maintained a steady presence behind the trio of leaders, never deviating by more than a few mph from his 425 mph pace. By Sunday afternoon the stands were filled and excitement was running high. Had Hinton simply been nursing Voodoo? Could "Hoot" hang on? Would Rare Bear even finish? As the line of racers appeared from behind the crowd, Steve Hinton Sr., flying the T-33 pace jet Pacemaker, pulled up and away, declaring "Gentlemen, you have a race!" Immediately, "Hoot" bolted for the lead and the dueling began. Lap after lap, Hinton kept doggedly after him, but with every pass through the "Valley of Speed" he fell a little farther behind and Stewart Dawson gained a bit on Voodoo. By the last lap, it was pretty clear that an upset was in the making, and attention shifted to see whether Hinton would be able to hang on to second. Sure enough, Strega took the checkered flag! Rounding the last turn, Rare Bear overtook Voodoo and at the last second Hinton called a Mayday and climbed to altitude to recover. And just like that it was over. "Hoot" Gibson had broken Steve Hinton's six-year winning streak, Rare Bear had not only finished, but Stewart Dawson had flown it to second place, and Dennis Sanders, flying the ever-dependable Dreadnought, would once again share the po-

What a race!

Leave it to a former astronaut ("Hoot" Gibson flew F-4s and F-14s as a Naval aviator and went on to pilot the Space Shuttle for NASA) to take the gold with such an out-of-this world win: "I've been dreaming about this for 25 years or so, and I've been a fan of the air races since I was a little kid. I can't believe I won the Unlimited championship. What a thrill." When asked about his plans for the future he said the only certain thing was that he'd be back next year.

By all measures, the races appear to have recovered from the repercussions of 2011's fatal crash. Attendance is up and the Reno Air Racing Association (RARA) is projecting a profit of over \$100,000 (where the original budget called for a \$630,000 loss). Overall, the event is projected to have generated more than \$70 million for the region's economy. "To say we're very pleased with the preliminary results of the 2015 National Championship Air Races is an understatement," said John Agather, chairman of the RARA board of directors. "We're already planning for a great event next year and are excited to have the Blue Angels returning in 2016." See you in Stead, September 14-18, 2016!

The Aviation Magazine would like to thank all of the staff, volunteers and sponsors who make this event possible and thank Kelly Glenn for arranging media access.

#### **Unlimited Breitling Gold Results:**

Place	Race #	A	ircraft	Pilot	Speed (mph)
1	7	P-51D Mustang	Strega	Robert "Hoot" Gibson	488.983
2	77	F8F-2 Bearcat	Rare Bear	Stewart Dawson	471.957
3	8	Sea Fury TMK 20	Dreadnought	Dennis Sanders	420.361
4	71	Sea Fury FB11	Sawbones	Curt Brown	415.539
5	924	Sea Fury TMK 20		Korey Wells	371.842
6	114	Sea Fury MK II	Argonaut	Mark Watt	365.298
DNF	5	P-51D Mustang	Voodoo	Steven Hinton	

Jet Class: #24 Pete Zaccagnini, DH115 Vampire, Vampire, 502.370 mph (top left page 9)

**T-6 Class:** #43 Dennis Buehn, AT-6, Midnight Miss III, 238.073 mph (top right page 9)

Sport Class: #352 John Parker, Thunder Mustang, Blue Thunder II, 377.403 mph (btm page 9)

Biplane Class: #62 Tom Aberle, Modified Mong Sport, Phantom, 245.109 mph (mid right page 9)

Ten-time champ Aberle set a new speed record of 284.454 mph in a qualifying race, beating his previous record by more than 10 mph.

Formula One Class: #11 Steve Senegal, AR-6, Endeavor, 239.432 mph (mid left page 9)

Results from all of the heats and races can be found online at http://reports.airrace.org.





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#### At the Pylons

Despite the incredible diversity of aircraft types, speeds, course layouts and number of laps, one thing remains constant: you have to fly a clean race. The official rules are clearly spelled out and first-timer racers must attend a training camp known as the "Rookie School." Enforcing these rules out in the "sticks" are the pylon judges, a close-knit group of roughly 150 members who come from around the globe each year to volunteer their time and expertise. Standing out in the high desert, enduring the extremes of heat and cold and searching for shade as aircraft fly directly towards you at speeds between 200 and 500 mph fifty feet off the deck is not for everybody. But for this small group it becomes addictive; many have been doing this for decades. After all, it's the best seat in the house at the "Fastest Motorsport in the World." (Yes, that's right, even the slowest winning speeds at Stead are faster than the track record at the Indianapolis Motor Speedway.) Each member of the team is responsible for ensuring that the pilots conform to the course rules. Among other things, pilots must keep their aircraft within altitude limits, pass outside the pylon and not pass other aircraft on the inside. We were fortunate to spend time at Inner Pylon 5 during the races where we watched Team Captain Dean Patmon and his crew in action. Each member knew exactly what to do and they did it with a professionalism that was a joy to see. We're looking forward to seeing them again next year in Stead.



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# Reno Air Show

Reno's Stead Field is best known for the National Championship Air Races. But what many people don't know is that the Reno Air Show runs concurrently with the races. What began as filler to entertain race fans between heats has evolved into a full-fledged show attracting top jet teams, military tactical demos, warbirds and world-class aerobatic performers.

Although racing action started at 8AM, welcoming ceremonies to kick off the air show didn't start until 11AM with the Wings of Blue Parachute Team flying in the US flag. During the course of the afternoon the air show acts and races would alternate. The air show flying began with a very spirited demonstration of the flight capabilities of the Dassault Falcon 7X. Part sales-pitch, part air show aerobatic act, it nevertheless showed how nimble this large-cabin, long-range, high-end business trijet is. The action heated up with Air Combat Command's F-16 Viper Demo. Maj Craig "Rocket" Baker took off in full afterburner and didn't let up except during the lowspeed high-alpha pass. After seeing the minimum-radius turn I'm sure many in the audience wondered what time Maj Baker could have set in the Jet class gold race! After his demo, "Rocket" paired up with Kevin Eldridge, flying the P-51D Mustang "Wee Willy II," for the Heritage Flight. Kevin later went on to place fifth in the Sport Gold race.

Breitling is a major sponsor of both the races and the air show, so it was no surprise that two of the performances were also sponsored by them.

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David Martin flew an impeccable aerobatic routine in the Breitling CAP 232, showing why he consistently ranks at the top of his field. And joining all of the L-39 jets at Stead for the races were the Albatros' of the Breitling Jet Team. The team spent its whole 2015 season in North America and Reno was one of only nineteen stops. They put on a very refined demonstration of precision formation flying. Their concluding maneuver saw the team approaching the crowd and fanning out as many teams do, but surprising the fans by setting off flares as they went vertical. If you missed them this year, you may have another chance next year. Rumor has it that they'll be back for an encore engagement.

The Commemorative Air Force's Tora!Tora!Tora! display also employed pyrotechnics in their display, but cranked it up to the maximum. The act recreates the Japanese surprise attack on Pearl Harbor using aircraft modified for use during the filming of the eponymous movie. For the past 35 years the act has toured the US, providing a dynamic history lesson about the event that forced the US into World War II. Although only a portion of the full complement of CAF aircraft was on hand, planes were soon flying in all directions with carefully choreographed explosions filling the sky with smoke and fire. The final air show performance of the afternoon was a flyby of a B-25 Mitchell to commemorate the Doolittle raid. Launched only months after Pearl Harbor, the raid brought the war to the Japanese mainland and began the inexorable road to victory of American forces in the Pacific.

In addition to the aircraft in the air, Reno also featured a rather large exhibition of aircraft on static display. The US military was well represented by a C-17 Globemaster III from Hawaii, two A-10 Thunderbolt IIs from Idaho, an F-15D Eagle from Oregon and a CH-47 Chinook and UH-60 Blackhawk from the local Nevada Army National Guard. An MQ-1 Predator from nearby Creech AFB was also on display.





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Stead Field also hosts the National Aviation Heritage Invitational. "The vision and mission of the National Aviation Heritage Invitational is to encourage the preservation of aviation history through the restoration of vintage aircraft to original flying condition. The National Aviation Heritage Invitational promotes aircraft restoration via friendly competition, bringing valuable aviation treasures together in one venue. This endeavor is a joint effort under the auspices of Perform Air International, the National Aviation Hall of Fame, the Reno Air Racing Foundation and the Smithsonian National Air and Space Museum." The P-51B Mustang "Berlin Express" owned by Max Chapman of Idaho Falls, Idaho and restored by Pacific Fighters won both the Henry "Hap" Arnold award for best military plane and the Neil A. Armstrong aviation heritage trophy for grand champion.

The Aviation Magazine would like to thank all of the staff, volunteers and sponsors who make this event possible and thank Kelly Glenn for arranging media access.













"It's amazing, just amazing," said a sweat-drenched Bonhomme, who had four wins and seven podiums in the eight races this season and scored a record-breaking 76 championship points. "What happened today was a million miles away from what I had imagined would happen. All kind of things happened that I didn't expect. But as a team, we sorted it out and here we are. It was the toughest World Championship I've ever had. It was hard work."

Bonhomme, the sport's most successful pilot with 19 career wins in 66 races, needed to finish at least sixth place to win the title. But the pressure was on just before flying into the track in a difficult head-to-head Round of 8 battle against Arch. Bonhomme was suddenly forced to return to the race airport due to technical problems that could have cost him the championship if he could not fly against Arch. Bonhomme had earlier got caught in a sudden downpour of rain in the previous Round of 14 that had done more damage to his wing and technical equipment than first thought. But his crew quickly repaired the air and ground speed equipment and Bonhomme returned to the sky to beat Arch and advance to the final, where he was second behind Hall. There was a lot of pressure on Paul and he did what he had to do – so congratulations.

Soon after the race on Sunday Peter Besenyei, of Hungary, one of the most successful pilots in the history of the Red Bull Air Race with eight career victories, announced that he was retiring from the sport he helped develop in 2003.

#### **RESULTS, LAS VEGAS:**

1. Matt Hall (AUS), 2. Paul Bonhomme (GBR), 3. Matthias Dolderer (GER), 4. Yoshihide Muroya (JPN), 5. Hannes Arch (AUT), 6. Michael Goulian (USA), 7. Nicolas Ivanoff (FRA), 8. Martin Sonka (CZE), 9. Juan Velarde (ESP), 10. Nigel Lamb (GBR), 11. Pete McLeod (CAN), 12. Kirby Chambliss (USA), 13. Peter Besenyei (HUN), 14. François Le Vot (FRA)

#### FINAL 2015 WORLD CHAMPIONSHIP STANDINGS:

1. Bonhomme (GBR) 76 point, 2. Hall (AUS) 71, 3. Arch (AUT) 34, 4. Sonka (CZE) 29, 5. Dolderer (GER) 26, 6. Muroya (JPN) 23, 7. Lamb (GBR) 20, 8. McLeod (CAN) 19, 9. Ivanoff (FRA) 15, 10. Goulian (USA) 13, 11. Chambliss (USA) 9, 12. Besenyei (HUN) 8, 13. Velarde (ESP), 14. Le Vot (FRA)

#### **2015 Challenger Cup Champion:**

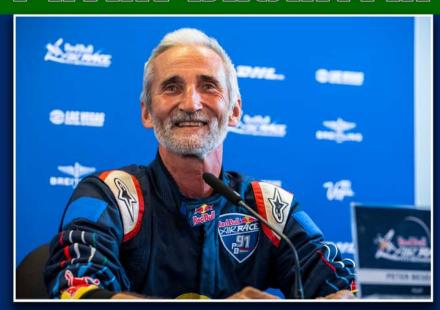
Mikael "Mika" Brageot of France hit the jackpot in Las Vegas on Sunday, clinching the top spot in the winner-take-all Challenger Class competition of the Red Bull Air Race to be crowned 2015 Challenger Cup Champion. Joining him on the championship podium were Slovenia's Peter Podlunsek in second and Chile's Cristian Bolton in third, with less than four-tenths of a second separating their results in the tight battle.







# PETER BESELVE



Hungary's Peter Besenyei, one of the most successful pilots in the history of the Red Bull Air Race with eight career victories, announced on Sunday that he was retiring from the sport he helped develop in 2003. Besenyei, 59, won the title in the inaugural season in 2003 and has been a driving force behind its growth through his 10 seasons of high-speed, low-altitude racing.

"I've been flying for a long time, since the very beginning of the Red Bull Air Race, and I made a decision a few days ago that this will be my last season," said Besenyei, a fierce competitor who had a total of 22 podiums in the sport he helped go from an idea into the world's fastest motorsport series with planes racing at up to 370 km/h in front of enthusiastic crowds at locations around the world. "I'll be more focused on my family and spending more time with my family and flying more air shows."

Besenyei completed all ten seasons and ended his sterling career after his 66th race at the end of the 2015 season. One of Hungary's most famous athletes, Besenyei was a driving force in the sport throughout his career. He was one of the founding fathers who helped develop the concept of the Red Bull Air Race. Besenyei gained worldwide fame in 2001 for flying upside down under the Chain Bridge in Budapest that spans the Danube River.

"It's an amazing event and I'm really happy to see how successful it has become," said Besenyei. "My heart will always be with it but not as as competitor any more."

He was also a driving force in helping Budapest stage the Red Bull Air Race eight times in the ten seasons years – the Hungarian capital, with its enthusiastic crowds watching the action from the banks of the Danube, shares the record for hosting the most number of races with Abu Dhabi. The starting line for the Red Bull Air Race in Budapest is underneath the Chain Bride, a tribute to Besenyei that makes the race in Hungary one of the most spectacular on the calendar.



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# Paul Bonhomme

Paul Bonhomme, the most successful pilot in the 10season history of the Red Bull Air Race with three World Championships and 19 race victories, announced on October 22, that he was retiring from the sport. The 51-yearold from Cambridge was the dominant force in the highspeed, low-altitude race for most of his 66-race career since its launch in 2003 and was in the thick of the championship battle in the last six seasons.

Bonhomme is retiring from the sport in which 14 of the world's best pilots from 11 nations race at speeds of 370 km/h through a 25-meter high racetrack because he would like to spend more time with his family and because it felt right after winning the 2015 World Championship on Sunday in Las Vegas. He will also concentrate on flying aerobatic displays at air shows with his Red Bull Matadors teammate as well as his career as a Captain flying Boeing 747s for British Airways.

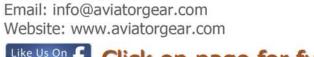
"I reckon now is a good time to stop. It worked, the team were (still are) fantastic and I have been very lucky to enjoy the fruits of great teamwork," said Bonhomme. "The flying and the opportunity to race has been utterly superb. Those moments in the track, in a well prepared race plane, is the ultimate flying experience. If you can fly it inch perfect at 200kts whilst 50ft from the ground, pulling 10G and then discover that you've set the fastest time, it is a buzz, a massive buzz."

Known around the world for his formidable flying prowess on the high-speed tracks, Bonhomme's smooth and efficient flying style in the race tracks set the standard in the sport for years with many of his rival pilots trying to match his racing lines and efficiency. Despite his friendly demeanor, deadpan humour, entertaining quips and engaging ability to explain the finer points of the sport to fans and reporters around the world, Bonhomme was a fierce competitor who loathed losing.

He got his private pilot's license at 18. He was soon working as a flight instructor and later became an air taxi pilot before flying charter flights. His aerobatics career began in 1986 and he has been flying at air shows ever

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# Wings Over Wine Country Air Show

REPORT & PHOTOGRAPHY BY NORMAN A. GRAF



The Pacific Coast Air Museum's annual air show took place September 26-27, 2015 at the Charles M. Schulz - Sonoma County Airport under mostly clear skies and near-record temperatures and once again "Wings Over Wine Country" featured a stellar lineup of aerial performers. The highlight of the show was the Canadian Forces Snowbirds Demonstration Team, but the list of aerial performers also included the US Air Force's F-16 Viper Demonstration Team, the USAF Academy's Wings of Blue Parachute Team, multiple aerobatic performers and a large collection of vintage warbirds, many of them locally based.

The air show had been held in August for many years and was often plagued with fog or overcast skies. The date was moved into September last year and it seems to be working weather-wise. The location was once again changed. Last year's venue, closer to the museum's grounds, was very cramped and not well laid out. This year's show was moved back to the northern end of the airport and was much improved. On Friday evening, the airshow held a performers' reception in the historic Redwood Hangar at Sonoma Jet Center. It featured a buffet dinner, swing music, and a silent auction and provided the public a terrific opportunity to meet and greet most of the performers in a social setting.

The gates opened at 9AM, with parking, ticketing and security handled very efficiently. Almost all of the participating aircraft were on static display so visitors could see them up close. Unfortunately, the continuing effects of the budget sequestration process limited the US military aircraft to a single C-17 Globemaster III from March ARB.

In addition to the Snowbirds' CT-114 Tutors, the Canadian Forces Air Force also brought a CC-115 Buffalo which was opened to the public. Many of the museum's aircraft had been towed over and spectators were invited to climb aboard. During the morning, aerial entertainment was provided by the local Radio Control club, after which the Sonoma County Sheriff's Office SWAT team demonstrated its capabilities during a simulated hostage rescue situation. Although a Cal Fire base is co-located at the airport, their aircraft were not on display as they were standing by on ready alert due to the wildfires raging throughout northern California at the time. Sure enough, they were called to fight a fire later in the afternoon during the show.

Opening ceremonies began at 11:15, with the Wings Of Blue Parachute team bringing in the US and Canadian flags. They would return later in the afternoon to put on their full skydiving demonstration. On Saturday a swearing-in ceremony took place for a number of Air Force recruits, with a member of the F-16 Viper Team administering the oath of enlistment. For many years, aircraft such as T-38s and U-2s from nearby Beale AFB would fly over to open the show, but sadly the federal budget cuts have put an end to that long tradition. However, a brightly-colored Coast Guard C-130 from Sacramento stood in this year.

The Red Stars Formation Flying Team started off the afternoon's flying with several passes in their Nanchang CJ-6s, ending with a very moving missing man flight. Fresh from competing in the gold races in both the Sport and Jet classes at the Reno Air Races (see our coverage on page 6), Vicky Benzing put on a very impressive aerobatic performance in her Stearman biplane. This was followed by a Korean War jet dogfight, staged by the North American F-86 Sabrejet and Mig-15 Fagot from the Planes of Fame Museum in Chino, California. (Our review of their air show earlier this year can be found here.) Spencer Suderman, world record holder in consecutive flat spins, put on another high-energy aerobatic performance in his Pitts biplane. Even if he didn't come close to matching his record 81 spins, he still wowed the crowd. He was followed by Frank "Dr. D" Donnelly performing "Old Time Aerobatics" in his clipped-wing Taylorcraft, after which Bill Cornick showed off his skills in his Pitts biplane "Big Bad Green." The Beechcraft Bonanza is seldom thought of as an aerobatic platform, but Jim Peitz later showed the spectators how it's done in a general aviation aircraft.



RCAF CC-115
Buffalo, main
image and
Spencer Suderman, in his
Pitts biplane,
inset image.





Then it got loud. Real loud! Sneaking up on the audience from behind, Major Craig Baker, the pilot of Air Combat Command's F-16 Viper Demonstration team, applied full afterburner and roared low and fast over the heads of the spectators. Staging out of nearby Travis AFB due to runway length restrictions, he caught most of the audience by surprise. His high-speed passes and minimum-radius turns coaxed quite a bit of vapor out of the blue northern California skies, despite the near-triple-digit temperatures. Following his full tactical demonstration "Rocket" joined up with Steve Hinton, piloting the F-86 Sabrejet, for an all-jet Heritage Flight.

"Wings Over Wine Country" is well-known for the historic aircraft that participate and although the numbers and variety of vintage fighters were down this year, the historic warbird flight was still impressive for an air show of this size. Four North American P-51D Mustangs, two Hawker Sea Furies, a Curtiss P-40 Warhawk and a Yakovlev Yak-11 made many passes in front of the crowd. This was followed by solo aerobatic demonstrations by the Sea Fury and P-51.

For the first time ever the Canadian Forces 431 Air Demonstration Squadron appeared at "Wings Over Wine Country." The Snowbirds closed the show in dramatic fashion, taking to the sky in section takeoffs and impressing the spectators with their graceful nine-ship formation flybys and thrilling crosses. Afterwards, they came forward to the flightline to answer questions and sign autographs.

Announcer Matt Jolley did a great job of keeping the audience informed and entertained and Air Boss Ralph Royce kept the action moving, expertly working around interruptions caused by the Cal Fire and commercial aircraft arrivals and departures.

We'd like to thank the show organizers, staff, sponsors, performers and the many volunteers for making this year's show such as success. We'd also like to thank Doug Clay, Marketing Director, for arranging the media access.















Wings Of Blue Parachute team jumped with the US, Canadian, US Army, Marines, Navy and Air Force flags, above. On Saturday a swearing-in ceremony took place for a number of Air Force recruits, below.

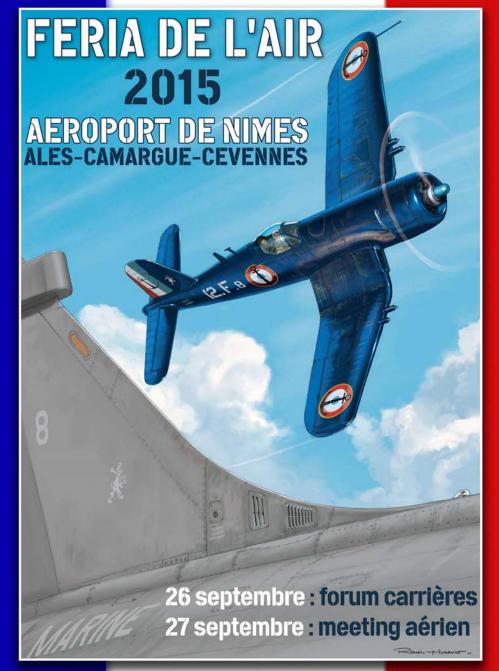






- Bill Cornick's Pitts S-2C "Big Bad Green" top left
- Stearman biplane of Vicky Benzing top right and waving to crowds middle
- Air Boss Ralph Royce with Announcer Matt Jolley doing a great job as usual, left bottom.





Report & photography by Patrice Olivier

The old Naval Air base Nîmes Garons, hosted a large air show on the weekend of September 27th, which we attended.

Just like the rest of the 30,000 spectators who attended, we enjoyed the variety of the aircraft performing. Where else could you see the power of the Rafale rubbing shoulders with a Piper Cub? The majesty of a Spitfire and its American cousin, the P-51 Mustang? Agility of aerobatic planes, all under the wings of the majestic Catalina? In total there were 10 different nations with 70+ aircraft represented both flying and on display. The Sécurité-Civile provided additional excitement with water bombing demonstration By the Canadair CL415, the Bombardier Dash 8 Q400MR and the Grumman TS-2A/Conair Turbo Firecat. The vent was closed with Rafale displays by the French Navy as well as from the Air Force's Solo Team.

Aviation Magazine would like to thank Mr Alain Maire and his team for their warm welcome.





- Douglas AD-4N Skyraider top left with OV-2B Bronco top right, see more about the OV-2B Bronco in our #39 November-December 2015 Issue of The Aviation Magazine
- Royal Navy Goodyear FG-1D Corsair left bottom
- Grumman TS-2A/Conair Turbo Firecat of Securite Civile fire fighter aircraft right middle
- 2 T-6s one is a US Navy SNJ-5 and the other is the U S Air Force 's basic trainer, bottom right.















- Canadian Vickers Limited PBV-1A Catalina, flying boat painted as USN PBY-5 top left and bottom
- 2 Dassault Flamants flying in formation beautifully top right
- Morane D-3801 in Swiss AF colours, Supermarine Spitfire PR.XIX, with No152 Sqn., SEAC colours and the P-51D Mustang during the Historical Flight, middle right
- French Navy Morane Saulnier MS 760 Paris right bottom









The third full weekend in September is a write off for me now having attended this year's Tiger Boys Airplane Works and Flying Museum open house. This group of die hard aviation enthusiasts holds their annual Air Days open house and fly in on this weekend and I became an instant fan of the event after attending it for the first time this year.

I'm certainly a big fan of the fighter jets, large formation aerobatic teams and all the other military and civilian aircraft that perform or can be found on static display at larger air shows. But the pure aviation energy that I felt at this small and intimate event was a welcome change from the shows I'm used to.

For over 35 years the Tiger Boys have made it their goal to track down antique and vintage aircraft that have been forgotten in farm fields, barns, forests and even the bottom of northern Ontario lakes for the purpose of restoring the aircraft. Not an uncommon activity given you can see many aircraft similar to the ones they've restored at museums around the world. What makes the Tiger Boys efforts unique is that they don't stop their restoration work when an aircraft is worthy of display in a museum, they continue until it's flight worthy. And they've had significant success doing it.

The list of well over 30 aircraft the group have restored and operated in flying condition include some very unique and interesting aircraft with the predominant type in their collection being the De Havilland DH82 Tiger Moth including a 1937 Thruxton Jackaroo 4 seat version of the Tiger Moth along with related Gipsy Moth DH60's as well. During the open house many of these aircraft are pulled out of their hangers and put on static display and flown throughout the weekend. Flights were available in some of the aircraft for as little as \$80.

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I had heard about the Tigers Boys open house many years ago but never managed to make it to the event until this year. Admittedly you don't see a lot of promotion for the event but after attending it I think it works in the their favour for two reasons. Firstly the layout of the Guelph Airpark located just east of Guelph Ontario where the Tiger Boys call home, doesn't have a lot of space available for parking so attracting large crowd would just leave a lot of people frustrated with the classic parking hassles of larger shows. More importantly though, the smaller nature of the event made for a much more intimate experience. While the day I went seemed well attended, the grounds never felt crowded. Add to that a reliance on common sense instead of barriers and fences to keep everyone safe and attending the event made me feel less like a spectator and more like part of the event. As aircraft arrived and taxied positions on the static line I was able to speak directly to their pilots and crew and ask questions about their planes receiving enthusiastic responses to my interest. People attending the event were welcome to wander around and get up close to the planes on static display. In general I'd describe the mood as relaxed and welcoming. The open house is a major fund raiser for the Tiger Boys. A donation is requested for access to the flight line and there were several booths selling merchandise and the classic volunteer manned BBQ setup. The groups website, www.tigerboys.com, mentions that flights are available free of charge but the site is in need of an update. With the growth of the event and rising costs of everything it takes to run a flying museum, flights do require a donation now. But I'd have to say you'd be hard pressed to find a better deal than the \$80 they ask for a flight in a classic Tiger Moth and the bargain price was well received as multiple planes were taking people for rides all day.

Possibly the very best feature of the event is a real treat for photographers. At the end of runway 05 the ground rises quickly. A short walk around the end the of the runway and up the hill provided a fantastic vantage point to shoot aircraft as they take off or buzz by doing low and over passes of the airfield. The pilots knew what the photographers wanted and were happy keep their departures low. I'll certainly be back to this event with camera in hand each year.







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## The perfect lens for aviation photography for the Nikon user!

Article and images by the Editor unless noted



In the fall of 2015, Nikon finally introduced a lens that is relatively affordable and with an excellent range for those who enjoy aviation photography at air shows and spotting at airports the Nikkor AF-S 200-500mm f5.6E ED VR.

In Canada it lists currently at \$1649.95, which is quite below their AF-S NIKKOR 80-400mm f/4.5-5.6G ED VR II at \$3,149.95, and also within the price range of other lens suppliers such as the Sigma 150-600mm "Sports" and the Tamron SP 150-600mm f/5.0-6.3 Di VC USD.

The Nikkor AF-S 200-500mm f5.6E ED VR is considerably larger  $108 \times 267.5$ mm (Diameter x Length) than the 80-400mm 95.5 x 203mm (Diameter x Length) however, it is smaller than the AF-S NIKKOR 200-400mm f/4G ED VR II 124 x 365 mm (Diameter x Length). While it is heavier at 2300g than the 80-400mm at 1570g it is much lighter than the 200-400mm at 3360g.

The performance of the Nikkor AF-S 200-500mm f5.6E ED VR is excellent when compared to the similar focal length lenses from Sigma, Tamron or even the Nikon's own 80-400mm f/4.5-5.6G ED VR II, in fact it is equivalent of the older 200-400mm f4 VR (Red) lens in my own opinion based upon owning these lenses. While newer AF-S NIKKOR 200-400mm f/4G ED VR II with Nano coating is slightly sharper it is also considerably more expensive at \$8195.95 Cdn., which has better weather sealing, faster f4 aperture and is considered to be a "professional" lens as indicated by the gold ring, one can over look these factors when it comes to cost of these lenses. The lens feels solid and balanced well with my D3S, D800, and D7200 bodies.

The Nikkor AF-S 200-500mm f5.6E ED VR, has a fast autofocus, and excellent VR, I was able to get sharp images handheld as low as 1/6 second on a stationary subject indoors. I've tested the lens both with an FX D800 full frame and a DX D7200 crop sensor bodies yielding impressive results. See samples on next page of my test indoor and at airport (location YYZ) all hand held with VR on "sport" mode. When at 500mm the lens is extended quite a bit and in a windy condition there is a considerable wind sheer on the lens.

Of course no lens is perfect, and when comparing the 200-500mm lens against the competitors from Sigma and Tamron it gives up 50mm on the wider side, and 100mm on the telephoto side. However, it is a constant f5.6 versus a variable one, which comes into play when focusing as not all, especially older, cameras can focus beyond f5.6 accurately. While f5.6 may sounds slow, with modern cameras with good ISO, it truly makes little difference outdoors, and it is viable option even indoors for a budget conscious person., who cannot afford a professional grade and sharper 300mm f2.8 at \$6,949.95 or a 400mm f2.8 at \$13,999.95, lens!

When used with a DX format camera it gives an equivalent focal length of a 300-750mm lens, which can come in very handy without using a teleconverter at air shows or nature photography. Below is the size comparison between the older 200-400mm f4 VR (Red) zoom lens on the left and the new 200-500mm f5.6E ED VR on the right when mounted on camera bodies. This lens is compatible with all current Nikon digital bodies that work with the electromagnetic diaphragm.



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100% detail of right image taken with the D7200,@200mm (300mm DX) 1/800 sec f8 ISO: 200



200% detail of right image taken with the D7200,@200mm (300mm DX) 1/640 sec f7.1 +1, ISO: 400 "INGESTION HAZARD" is sharp & clear



Shooting Data IPTC/MP Data
File: 800\_9319.JPG
File size: 15.4MB
Image counter: 29514
Camera Model: NIKON D800
Camera serial number: 5000292
Firmware: Version 2:10
Owner:
Date/Time: 2015:11:06 12:13:10
Copyright: (C)2015
Shutter speed: 1/6 sec
Aperture: 6.3
Exposure mode: Av
Flash: Off
Mettering mode: Multi-segment
ISO: 400
Lens: VR 200-500mm (//5.6G
Focal length: 500mm
Focal length: 500mm (in 35mm film)
VR Image Stabilization: On
AF mode: AF-C
Image size: 7360 x 4912
Rotation: none
Image quality: FINE
White balance: AUTO1
Active D-Lighting: Off
Picture control: STANDARD
Color space: sRGB
Saturation: Normal

EXIF Data



100% detail of right image @500mm 1/6 sec f6.3 ISO





ico, Montenegro, Morocco, Republic of Korea, Serbia, Tunisia and the United Arab Emirates."

Trident Juncture was the largest NATO exercise since 2002, and included land, air, naval and special





Zaragoza Air Force Base, Spain

Report by Wolfgang Jarisch, Joe Ciliberti & Brendon Attard with photography as noted



Image by loe Ci



The exercise was based on a fictitious scenario. It portrays a conflict in fictitious "East Cerasia" where one nation invades a smaller neighbour and threatens to invade yet another country. The resulting fictitious crisis is caused by competition for resources and has ethnic and religious dimensions. The scenario's implications are global, with impact on maritime navigation and energy security and risks such as terrorism and cyber attacks.

In response, to the fictitious scenario the UN Security Council authorized a NATO International Support Assistance Mission to help protect the threatened states and safeguard freedom of navigation. This Mission will was simulated by the Trident Juncture 2015 exercise.

The Aviation Magazine was there to cover the exercise at Zaragoza Air Force Base, Spain. All aircraft and helicopters were supported by the air base's ground crews. In the training area of San Gregorio, which is on the biggest military training area in Europe, for this exercise a large village was built resembling an Taliban village. To make the scenario even more realistic Spanish and US soldiers role played the part of "native" residents.

Zaragoza was very busy, one of the busiest section was the area where the US Army stationed their Apaches and Blackhawks. The US Army was supported by Belgian Agusta A-109 and Czech Mil Mi-171Sh. In additional ground attack role were the Czech Air Force with their Areo L-159 Alca's. The airspace was secured by the Spanish Air Force EF-18's.



US Army's CH-47F above and the Czech Mil Mi-171Sh, below with the Taliban village in the background.



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US Army's Sikorsky HH/UH-60 Blackhawks above and their Boeing AH-64D Apache below, and a B-52H flying over the exercise area, top right.





Apart from battlefield airspace security by the Spanish Air Force's EF-18's their main role was supporting the attacking friendly paratroopers in San Gregoria. Several transport aircraft were used for these missions among them five USAF C-17's used only during the media day. One of the aircraft which we found most interesting used during these missions was the Ukrainian Air Force's IL-76MD. This aircraft has the capability to fly 225 fully equipped paratroopers into the combat zone. The aircraft has two levels, which is absolutely unique. SAR and CSAR Missions were flown by Spanish Eurocopters AS332. For special missions the US Air Force brought in three brand new CV-22B's Ospreys to Zaragoza from the SOC in Mildenhall.

November 4th marked the day NATO wanted to show off to the media some of its air and land capabilities over the San Gregorio ranges just outside Zaragoza, Spain. It turned out to be a lovely typical Spanish November morning coming straight on the heels of two days of monsoon-type weather marked by heavy downpours and strong winds.

The arrival of NATO Secretary Jens Stolterberg on board a Spanish Puma signalled the imminent start to the day's activities and after a few speeches the ranges were overflown, right on time, by a pair of mighty B-52s that flew all the way from their base in Barksdale, LA., USA. The pair had hardly departed the ranges when the sound of heavy helicopters could be heard, but not seen, until a formation of 4 US Army Chinooks escorted by two Apaches scraped right over the last hill to commence their 'takeover' of the Taliban-like village set up purposely for training the troops before they deploy downrange. Tanks, helicopters, gunfire, APCs were all in action with repeated explosions taking part all over the San Gregorio ranges. Czech AF L-159 Alcas and Spanish F-18 Hornets made repeated visits to the range as slowly but surely, the bad guys were driven out and eventually eliminated by the end of the morning's activities.

The Aviation Magazine would like to thank to the Spokesman of the exercise Lt. Col. Luc Gaudet (Canadian Army), Lt. Col. Marco Schmidl (German Air Force), Lt.Col Thomas Dillschneider (German Air Force), Capt Leva Gulbiniene (Lithuanian Air Force), Maj Uwe Welter (German Army), Maj Felix Barquero for their cooperation and hospitality.

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Spanish EF-18M Hornets top left and right, USAF CV-22B Ospreys left middle, RCAF's CC-130J left bottom and the Ukrainian IL76MD with double decker inset, right bottom.











The tenth annual California Capital Airshow took place October 2-4 and attracted record crowds. For the first time it featured a Friday night show called Airshow After Dark and by all accounts it was a success. This year's show featured two military jet demonstration teams, the Navy's Super Hornet TacDemo, world-class aerobatic performers and warbirds to celebrate the 70th anniversary of the end of World War Two. And it all took place under blue skies with pleasant temperatures.

The gates opened at 0900. Entrance signage from the freeway was extensive, the expansive apron of the former Strategic Air Command base provided plenty of close-in parking and ticket and security checks were handled very efficiently. Spectators have the option of purchasing VIP seating or chalet packages but there was a lot of space both to show right and left along the fenceline to put up folding chairs or lay out a blanket. The US airshow industry still suffers from the effects of the ongoing budget sequestration which limits military participation, so military aircraft were still scarce. The Air Force had a C-5 Galaxy from nearby Travis AFB, two T-38 Talons from Beale AFB, a B-52 Stratofortress, "Global Warrior," from Barksdale AFB, and an Air National Guard F-15D Eagle from Fresno. The US Army had a UH-60 Blackhawk from the local National Guard installation at Mather Field. UPS and FedEx brought cargo planes such as the 757 and 767 and a vintage DC-3 and C-54 Skymaster added to the larger aircraft on static display. Interspersed with these were very many smaller warbirds, civil aviation and agricultural aircraft as well as military vehicles and classic cars. Add to that the numerous food and drink stands, souvenir vendors and the numerous science, technology, engineering, and math exhibits and there was a lot to see on the ground.

At noon, skydivers jumped in both the Canadian and American flags to open the show as "O Canada" was played and "The Star-Spangled Banner" was sung by Air Force Technical Sergeant Nathan Tawbush. Jon Klatt and Rob Holland circled the parachutists as they descended, then performed teaser routines for their full performances later in the afternoon. The formal flying began with a warbird tribute to commemorate the 70th anniversary of the end of World War Two. A B-25J Mitchell, "Old Glory," and a B-17G Flying Fortress, "Sentimental Journey," were accompanied by two P-51D Mustangs as they made several passes from both directions. At the conclusion of their performance a massive pyrotechnic "Wall of Fire" erupted along the length of the runway. For the next four hours the skies above Mather Field were filled with the sounds of jets and props, and in the case of "The Screamin' Sasquatch Jet Waco" sometimes both at the same time. Both John Klatt and Rob Holland flew amazing aerobatic routines in their respective MX-S aircraft. Gene Soucy put on an aggressive display in his ShowCat biplane, but the massive amount of smoke he generates makes photography difficult. Jeff Boerboon also performed a biplane routine, but in the jet-assisted Waco.

However, it's a fair bet that most of the spectators were there to see, hear and smell the modern military jets. First up was the Navy's Super Hornet TacDemo, or tactical demonstration. Lt. Zach Pleis, from nearby Granite Bay, is a flight instructor with VFA-122, the "Flying Eagles," at Naval Air Station Lemoore. He flew the single-seat F/A-18E Super Hornet through an amazing series of maneuvers that started off with a full afterburner launch into an inverted roll and just didn't let up. Many in the crowd had never experienced a touch-and-go landing, so were momentarily disappointed when "Sprite" seemed to be ending his demo early. They were quite surprised when he hit the 'burners and took off again to complete his routine. The high-speed passes pulled an impressive amount of vapor out of the clear blue sky.

The Canadian Force's Snowbirds demonstration team concluded their 2015 season at Sacramento in fine form. Their nine-ship formations were spot on and their transitions were smooth and deliberate and the solo and pair crossings at show center elicited gasps from the crowds. The Thunderbirds closed the show in their usual high-energy precision manner in a series of maneuvers meant to show off the capabilities of the F-16 Fighting Falcon.

Mather Field's runway layout (4/22) can be challenging for photography early in the day, but by the afternoon when the majority of the flights take place it is much less of a problem. The action takes place close enough to the flightline that a 400mm lens is sufficient to capture most of the action, especially on a cropsensor camera. The airshow organizers provide a variety of different opportunities for the aviation photographer, including access on arrival and practice days, early morning and evening access and preferred shooting locations before and during the airshow, including a scissor-lift at show center.

This year's show attracted a record 109,000 spectators, exceeding the expectations of the organizers. "We're very pleased with the success of the Airshow and our unforgettable night show," said Darcy Brewer, executive director of the California Capital Airshow. "The Sacramento region enjoyed a boost to the local economy as visitors from across the nation and several other countries attended this thrilling and meaningful event." The proceeds from the event will fund scholarships to regional youth interested in pursuing education and careers in Science, Technology, Engineering, Mathematics, Aviation and Aerospace.





"Based on the success of the show, the positive feedback from our guests and the overwhelming support of our community partners, the Board is looking forward to another ten years," said Ted Gaebler, chairman of the California Capital Airshow Board of Directors.

Narrator Ric Peterson and Air Boss Ralph Royce teamed up once again and did a fantastic job of keeping the airspace safe and the record audience informed and entertained. We would like to thank Darcy Brewer, executive director of the California Capital Airshow, and all of the staff, volunteers and sponsors for putting on such a great show and Karen Strong for arranging the media access.













- B-17 Flying Fortress "Sentimental Journey" top image
   USAF Thunderbirds, left bottom
   Film strip, left to right: Rob Holland, MX-S Aerobatics, Snowbirds, Narrator Ric Peterson and Air Boss Ralph Royce.

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The theme for the 2015 MCAS Miramar Air Show, which took place October 2-4, was "A Salute to Veterans and Their Families." For three days, the Air Station invited people from the surrounding communities and around the world on board to witness the largest military air show in the nation. With three jet teams, two jet tactical demonstrations, the amazing Marine Air Ground Task Force demonstration and a world-class lineup of civilian aerobatic performers in the air and acres of aircraft on static display, this year's show did not disappoint.

The schedule for the three-day show was roughly the same each day. The gates opened to the public at 8:15 AM, the flying began roughly an hour later and continued pretty much non-stop until 4 PM. Additionally, on Saturday there was a twilight show which started at 5:30 PM and concluded several hours later with the "Great Wall of Fire." With so much flying and pretty much the entire Marine aviation inventory on static display, you really have to devote at least two days to this show. And even then you'll miss something. Entry to the show is free and there is plenty of room along the flightline at both show right and left to set up folding chairs or blankets to enjoy the show. But the high bleachers are definitely worth the extra investment and include an air show program in the cost. There are numerous other upgrade options including box seats and a variety of chalets providing shade and catered food and drinks. Most of the many food and drink stands distributed throughout the tarmac were operated by base squadrons with proceeds going towards their morale and welfare funds. There were also very many other vendors selling souvenirs and sundry air show items. "Squadron Row" offered the opportunity to stock up on patches, coins and various other unit-related merchandise.

The flying schedule featured civilian aerobatic acts primarily in the morning with the military performing in the afternoon. The Blue Angels concluded the afternoon's flying each day. Sean D. Tucker, flying the Oracle Challenger III biplane, got the action started with a teaser routine that he would expand on later in the day. He was followed by John Collver flying his tribute to veterans in the AT-6 Texan "War Dog." Steve Stavrakakis continued with a similar routine in his Romanian IAR 823 "Wild Thing." Dan Buchanan, being towed aloft in his hang glider, interrupted the end of Steve's routine, for which Steve trimmed his ribbons with his propeller. All in good fun, of course. Brett Willat continued the glider theme,

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performing a beautiful aerobatic routine in his Grob G-103 Acro sailplane. The first military tactical demonstration of the day was by the Marine Corps' AV-8B Harrier II. There were only eight civilian airshows at which the Harrier performed this year, so many enthusiasts came to Miramar to see the VMA-211 "Wake Island Avengers" from MCAS Yuma perform the TacDemo. Flying the demo was Major Michael Carty, of the Royal Marines, which must have been a delight for all of the Brits in the audience, who, since the retirement of the "jump jet" from Royal Air Force and Royal Navy service, have been forced to travel overseas to see the Harrier perform. Major Carty joined the "Wake Island Avengers" in 2014 as a foreign exchange pilot and since August 2015 has served as the VMA-211 Executive Officer. Despite his call sign of "Princess," or perhaps because of it, Major Carty put on a very aggressive demonstration of the Harrier's tactical capabilities, flying the gamut from high speed passes to hovering flight. He clearly showed that although its days of service in the USMC are also limited, it remains a very capable airframe, perfectly suited to the tactical needs of the Corps.

The Patriots Jet Team finished the morning's flying. The team includes former members of the Thunderbirds, Blue Angels and Snowbirds and their flying style reflects their history. They fly the L-39 Albatros like the military trainer that it is, very fast, very low and very aggressively. This was in contrast to the Breitling Jet Team, which also flies the L-39. Their demonstration was much more balletic, with smooth, graceful formation changes. Miramar was to be their penultimate North American air show, but it has since been announced that they will be extending their tour into 2016.

Official opening ceremonies for the air show commenced at noon, with welcoming addresses from Brigadier General Edward D. Banta, Commanding General, Marine Corps Installations West, and Colonel Jason Woodworth, commanding officer of MCAS Miramar. "This is our opportunity to show off a little bit what the Marines and Sailors of MCAS Miramar do every day to you," said Col. Woodworth. "Our theme this year is 'A Salute to Veterans and Their Families,' so what I ask of all the civilians in the crowd who are visiting today [is to] take a minute to grab one of the young men and women in uniform today and say hello to them and get to know a little bit about them and their families." The 3rd Marine Aircraft Wing Band played a number of patriotic songs, concluding with the national anthem as Staff Sgt. David Echeverry, of the US Army's Golden Knights, parachuted in with the US flag.

The highlight of the Miramar airshow for most of the spectators was clearly the Marine Air Ground Task Force, or MAGTF. It was one of the very few opportunities to see the coordinated use of close-air support, artillery and infantry forces the Marine Corps utilizes in combat. Capt. John Reeves, the "Voice of MAGTF," provided his usual exuberant, over-the-top narration of the action. An ATARS (Advanced Tactical Airborne Reconnaissance System) equipped F/A-18D Hornet passed overhead, popping intermittent clouds of vapor as the pilot flirted with the speed of sound. Shortly thereafter massive explosions rocked the airfield, mimicking the effect of offshore naval bombardment guided by his recce flight. Repeated passes by Hornets of VMFA(AW)-225 "Vikings" and Harriers of VMA-211 "Wake Island Avengers" simulated the tactical softening-up of the target by aerial assets. Two AH-1Z Super Cobras of HMLA-369 "Gunfighters" finished the job with multiple strafing passes. A team of Marines from the 1st Recon Battalion then fast-roped in from hovering UH-1Y Super Hueys, also from HMLA-369 "Gunfighters." Having determined that the landing zone was secure, they clipped themselves to a rope dangling from a Huey and the eight Marines were extracted and flown through the sky. The main contingent of "boots on the ground" was delivered by three MV-22 Ospreys from VMM-163 "Evil Eyes." The Marines immediately began to advance towards the crowd line, providing covering fire as they advanced. Hornets, Harriers and Venoms continued to provide fire support as a CH-53E Super Stallion airlifted in a Humvee. Finally the ground support arrived in the form of two M1A1 Abrams main battle tanks and several LAV-25 Light Armored Vehicles racing down

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the runways. After the action concluded, all of the assets joined in a "Pass in Review." The airborne assets flew overhead, the jets simulating an aerial refueling with a KC-130J Super Hercules. The ground troops and vehicles passed along the crowd line, cheered on by the many spectators. The number of aircraft was less than that in last year's air show, and, of course, for the first time did not include the CH-46 Sea Knight, but was impressive nevertheless.

Another highlight for many in the crowd was the F-35B Lightning II tactical demonstration. The flight was performed by Major Brendan "Lenny" Walsch of VMFA-121 "Green Knights," from MCAS Yuma. The Joint Strike Fighter appeared downright un-stealthy as it pulled a great ball of vapor out of the sky and trailed long streamers of wing-tip vortices as Maj. Walsch circled tightly in front of the crowd in a high-g, minimum-radius turn. He then slowed the Lightning II to a hover and descended slowly to land. After a short cooling-down period he took off with full afterburners and made a number of high-speed passes before finally landing for good. For many in the audience this was their first view of the F-35 in flight and despite the controversy surrounding the Marine Corps' declaration of Initial Operational Capability for the Lightning II, it was a definite crowd pleaser.

The Blue Angels finished the show as they always do, starting with Fat Albert's amazing demonstration and proceeding through the six F/A-18 legacy Hornets' precision flight demonstration.

The ongoing budget sequestration continued to limit the military aircraft on static display, but the situation has improved, albeit slowly. Various aircraft from the Navy, Air Force and Coast Guard were on display this year as were those from NASA and Homeland Security. "Squadron Row" was well populated with aircraft from the units based at MCAS Miramar. A pair of German Air Force Tornados from Holloman AFB returned again this year, providing the only international participation. The Flying Leathernecks Museum once again had transported almost all of their aircraft to the apron, giving visitors an opportunity to see aircraft representing the Marine Corps' long aviation history. There were also many private warbirds on display, including a beautiful natural-metal PB4Y-2 Privateer, the Navy version of the B-24 Liberator bomber.

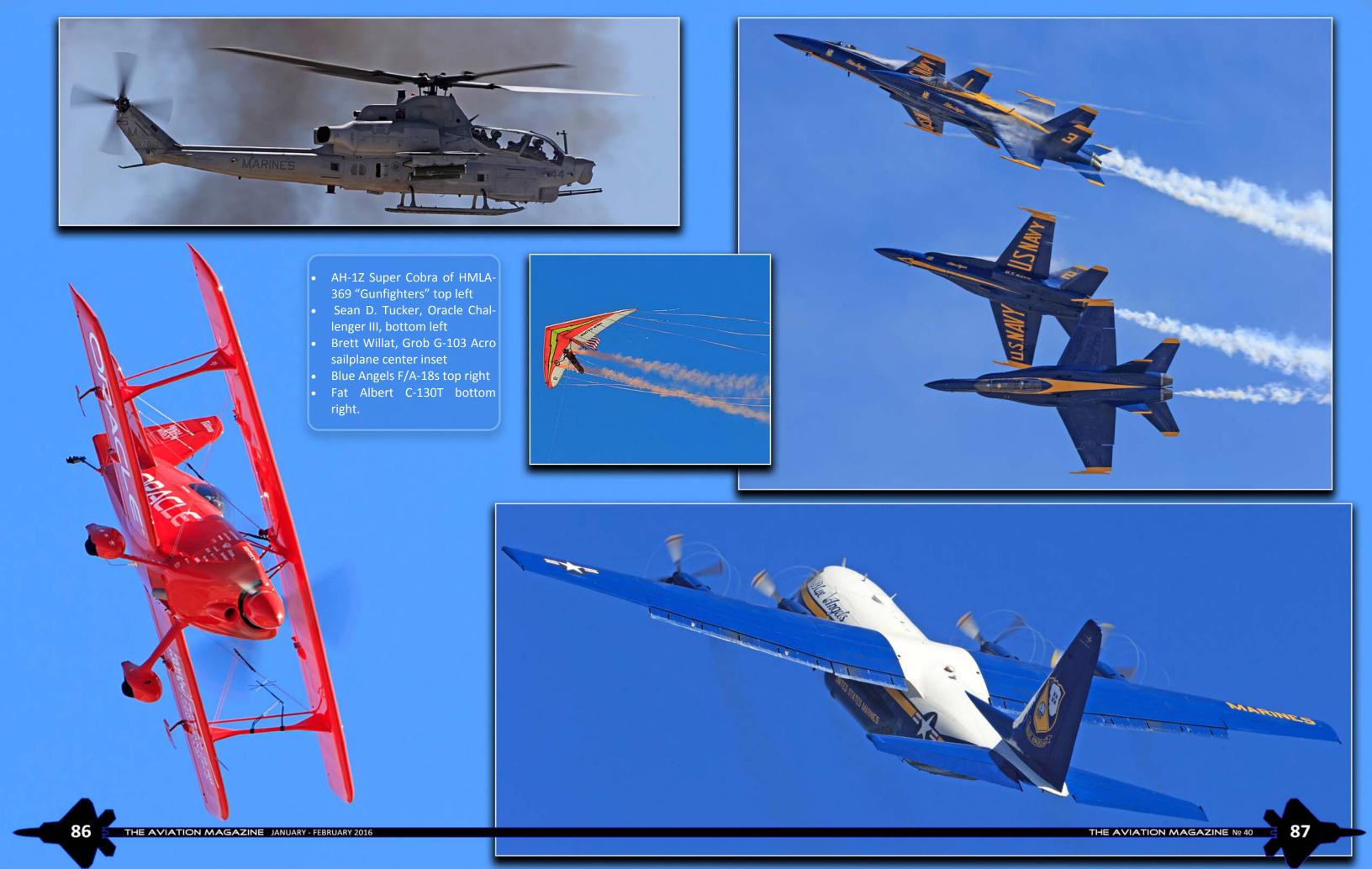
Announcers Rob Reider and Matt Jolley did a good job of keeping the hundreds of thousands of spectators informed and entertained over the three days of flying. We would like to sincerely thank Capt. Melanie Salinas, Director, Public Affairs, and all the members of her team for a fantastic and memorable experience covering the Air Show. Finally, we would like to thank all the Marines, volunteers and performers at MCAS Miramar for making this Air Show such a success.





The Patriots Jet Team top left, AV-8B Harrier II VMA-211 "Wake Island Avengers" above and the M1A1 Abrams Tanks rolling by, below.











F-35B Lightning II with Major Brendan "Lenny" Walsch of VMFA-121 "Green Knights," from MCAS Yuma.

**S**an Francisco's Fleet Week was started in 1981 by then-Mayor Dianne Feinstein and in the 35 years since has grown to become the largest and most significant event of its kind in the nation. Fleet Week celebrates the rich naval tradition in the Bay Area, honors the nation's service members, and facilitates annual disaster preparedness training between the Navy, Marine Corps, Coast Guard and local first responders. It includes a parade of ships which enter the Bay by sailing under the Golden Gate Bridge and concludes with the Air Show.

Friday was technically a practice day, but because the Parade of Ships takes place then, many spectators chose to attend. And since Karl the Fog is always a threat, locals know to take advantage of any opportunity to see the show. The formal flying was opened by the US Navy Parachute Demonstration Team jumping from a Missouri Air Guard C-130 (they had jumped from Fat Albert on Friday). The "Leap Frogs" performed their usual high-energy display, starting with Special Warfare Operator 1st Class Trevor Thompson flying in an enormous US Flag. Others soon followed, forming into their trademark multiplecanopy formations, one double-stack trailing a long candy-cane of smoke. The last pair locked legs and hurtled straight towards the ground, separating and flaring at what seemed the last possible instant, before landing at Marina Green.

US Coast Guard helicopters are a common sight in the Bay Area, constantly in the air training or engaging in rescue operations. A crew from Air Station San Francisco put on a very nice demonstration of their Search and Rescue capabilities. A bright orange MH-65 Dolphin entered the show box and dropped a wetsuit into the water. It then left, circled back, slowed to a hover and descended to within 20 feet of the simulated swimmer in distress. Petty Officer 3rd Class Dave Munns jumped from the helicopter and after securing the victim ignited a Mark-124 smoke and illumination signal to guide the chopper back to his position. A collar was lowered and soon the rescue swimmer and victim were being hoisted into the helicopter. The crew waved to the crowd as they flew low over the Bay on their return to base.

Then it was time for some jet noise. Greg Colyer, recently retired from his job as an air traffic controller at Oakland's International Airport, put on his usual impressive aerial demonstration in his T-33 "Ace Maker II." On Saturday, the fog had started to creep back in at this time, covering the tops of the towers of the Golden Gate Bridge and extending towards Alcatraz Island. "Wired" did a great job of skirting the fog and keeping within the aerobatic box and although I've seen him lower to the deck at other shows he did make several low and slow passes in front of the crowd. One drawback to the Fleet Week air show is the fact that the aerial performances take place so far out over the Bay.

Part of the reason is the navigable lane just north of the San Francisco shoreline which is kept open for ships to transit. Another downside is the fact that many sailboats choose to anchor in this area, making viewing and photography of low-flying aircraft difficult (but not impossible).

Matt Chapman brought us back to prop-speed, but didn't lower the excitement, in his new, custom-designed Embry-Riddle Extra 330LX aircraft. His new two-seater is stressed to +/- 10g and has a roll rate of 420 degrees per second, and it seemed that Matt was pushing the envelope as he put on a very high-energy show. Next up were the locally-based RedStar Pilots Association CJ-6 Team, flying their four Nanchang trainers in a combination of formations. Michael Wiskus then took us back into the aerobatic arena with his bright red Lucas Oil Pitts S-1-11b biplane. Many in the audience mistook him for Sean D. Tucker, not only from the appearance of his aircraft but also by the quality of his flying. Michael has been a powerhouse this season, putting on a very aggressive and highly energetic show. He opened with a dozen snap rolls on a vertical downline, pulling out just over the waves and proceeded with a series of maneuvers that elicited repeated "oohs" and "aaahs" from the crowd during the rest of his routine, most of which was spent low over the water or inverted.

Based in nearby Byron, the Patriots normally don't rehearse during Friday's practice session. But they roared in on the weekend with the all the precision you would expect from a team that includes two former Thunderbirds, a former Blue Angel solo pilot and a former Snowbirds Outer Left Wing pilot. The six black L-39s are fitted with synchronized smoke systems that beautifully integrate red, white and blue smoke into their maneuvers. There's never a dull moment during their tightly choreographed routine. However Saturday's show included a unique performance as right before the final six-ship break Dean "Wilbur" Wright proposed to his girlfriend by asking "Will you be my wingman for the rest of my life? Say yes or no before I break!"

United Airlines has been a long-time sponsor and regularly flies one of their passenger jets in the show: this year they flew a 737 with the "march of dimes" livery on Saturday and a 757 on Sunday. With three international airports in the area and hundreds of takeoffs and landings every day, you wouldn't think the masses of spectators would be very impressed to see a wide-body passenger plane perform. The pilots, however, really put on a great show, banking sharply, climbing steeply and flying low and slow with flaps and gear extended during the dirty pass.

Sean D Tucker has been a regular Fleet Week performer and once again amazed the crowd with his Oracle Challenger III biplane. Despite the distance from the crowd, his small red biplane stood out brightly in the clear blue skies and his smoke system allowed spectators to follow his maneuvers, although some of the subtleties and difficulties may not have been fully appreciated. One such maneuver is the flat turn, which involves turning the airplane without banking its wing. Not only does Sean perform this well, he performs it while inverted! Other, more spectacular maneuvers include the Centrifuge, Double Hammerhead, Alley Oop, Forward Flip and the Harrier Pass. It wouldn't surprise me at all if he figures out a way to include his

unique Triple Ribbon Cut over the water someday.

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The Blue Angels are the highlight of the show and the excitement increased as their show time approached. Because they staged out of Oakland International Airport there was no pre- or post-flight ground show, but the Blue Angels did make an appearance at Pier 39 on Saturday evening, signing autographs and answering questions from their many fans. Unfortunately "Fat Albert" did not fly on Saturday, but the Blue Angels put on their high show under bright blue skies. A marine-layer fog bank stayed well outside the Golden Gate, but there was enough moisture in the air to form impressive clouds of vapor around the aircraft as they pulled g's. During the Double Farvel the jets had vapor both on their top and bottom sides. They were in fine form, flying in extremely tight formations and their timing was spot-on: all six jets re-joined at the same instant during their loop break cross.

The airbox is located over San Francisco Bay, just north of the city's waterfront. As such, there is no ground portion of the air show, and no aircraft on static display. Marina Green does, however, have the usual food booths, vendors and kid zones, as well as pavilions with chairs, shade and catered food for those willing to pay for the comfort and convenience. This year featured a Humanitarian Village display which demonstrated the capabilities of the US Military and Civil organizations in responding to a disaster. There were four different theme camps: Mass Care and Shelter, Power and Utilities, Community Response & Rescue, and Environmental Management & Decontamination. Pretty much any place in the area provides a beautiful venue from which to watch the show: from Fisherman's Wharf, past Crissy Field, to standing on the Golden Gate Bridge itself, the sun is behind you, making photography a joy. From Angel Island, Alcatraz or out on the water aboard the Jeremiah O'Brien you have beautiful views of the city skyline as a backdrop. There are no bad seats!

Oh, in case you were wondering, she said "yes."



United Airlines Boeing 737-924(ER)(WL) top left, RedStar Pilots Association Formation CJ-6 Team top right, The Patriots Jet Team L-39C middle right



Film strip I to r: US Coast Guard MH-65D Dolphin SAR Demonstration; Greg "Wired" Colyer, T-33 Shooting Star "Ace Maker II" Matt Chapman; Embry-Riddle Extra 330 Aerobatics; Michael Wiskus, Lucas Oil Pitts S-1 Aerobatics; Sean D. Tucker, Oracle Challenger III Aerobatics; The Patriots Jet Team





















Can't have the San Francisco Fleet Week without any ships.... So we feature a couple of them here:

- USS Stockdale (DDG-106) is an Arleigh Burke-class guided missile destroyer, left (U.S. Navy photo—Cpl. Joshua Murray)
- HMCS Calgary (FFH-335) is a Halifax-class frigate of the Royal Canadian Navy top right (U.S. Navy photo—Cpl. Joshua Murray)
- USS Cape St. George (CG 71) is a Ticonderoga-class a guided-missile cruiser, near Alcatraz Island, bottom right (U.S. Navy photo—MC3 Gerald Dudley Reynolds





On arriving at DWC by taxi on Tuesday morning, [the typical taxi fare from Dubai city, around 37km one way was of about AED100, ie €25] the first day for us, it was very clear that the day ahead was going to be a scorcher. Already the sun's rays were intense and only stressed further upon realising that our taxi driver had actually managed to drop us off at the wrong spot!

Skyview grandstand spectators are not permitted to access the air show from the main airport building. We were instead directed to walk along the outside perimeter of the airport towards the southeast and around some rather large parking lots complete with several of the latest models of SUVs, Range Rovers, Humvees and Ferraris. Its Dubai. So instead of cooling off with a cold beverage in hand we were instead treated to a 20 minute walk under the 40deg Celsius midday sun. Upon arriving at the correct entrance I asked one of the guards positioned there whether we could wait for the main gate to open somewhere in the shade. His reply was "This is Dubai, what did you expect!!" so initially our request was refused and it quickly became quite apparent that the midday walk was only going to be followed by the midday wait of around half an hour to 45 minutes on a dusty kerb.

To enter the air show the general public admission from the 9th till the 12th November was AED80 per person per day, equivalent to about €20. Tickets could be purchased online beforehand from around two weeks before and were electronically refundable to a credit card account in the event that the show was cancelled. The show on the 8th November was provided exclusively for groups of 20 persons or more. The Skyview grandstand is located just outside the perimeter fence of DWC. Access to the Skyview does not allow persons to enter onto the static park or the trade area at the air show. Admission to Skyview was available from noon till 4.30pm on the day. Displays commenced at 2pm. On Wednesday the 11th November the air show had to be cancelled due to strong wind conditions. The air show started at 2.30pm on Thursday 12th November. This review covers the displays held on the 9th and 10th November which proceeded punctually and as per programme. We did not have access to the trade show or the static park. As noted earlier we did not ask for a Media Pass for this event, as we truly wanted to see the event from a general visitor's perspective.

Luckily we had emailed Skyview on several instances before travelling to Dubai and were fortunate to meembers of the Team who were very helpful and immediately let us in and avail ourselves of a giant ten which had been erected close to the food and beverage kiosks. Thank you Darren.

The Skyview grandstand has a maximum capacity of around 6,000 spectators but on the Tuesday barely held a thousand people on it. Dubai air show, like many events in the region, follows a more relaxed flow than its European counterparts. The freshly printed day's programme looked very promising and held around 15 displays ranging from the B-1B Lancer and Dassault Rafale to the latest Airbus A350. Every major display was followed or preceded by a slower moving propeller powered aircraft or trainer. The aerobatic Al Fursan team opened proceedings on Tuesday with their seven smartly painted black and gold MB-339NAT meanwhile on Wednesday it was the turn of the superbly choreographed Italian Frecce Tricolori which got things underway with their team of ten MB-339PAN sporting the new tail tricolours and complete with their 55th year commemorative emblem on their aft fuselage.



Static aircraft parked on the main apron relatively nearby included (on the Tuesday) three A380s from Etihad, Qatar and Emirates while on Wednesday the Etihad A380 had been replaced by a National Airlines B747-400. Several medium to large sized executive jets filled the remaining part of the static park, i.e. air craft such as the Bombardier Global Express, Embraer Legacy and Dash 8. Elements of military fast jets training aircraft, helicopters and transports were positioned farthest from the grandstand and were barely visible, a huge disappointment.

All display aircraft except for the B-1 and F-22 operated from Al Maktoum itself. The runway threshold is situated around 2km away, towards the west, so from a spectator point of view this makes photography of aircraft taking off or landing virtually impossible. Not only is the runway quite distant but the gentlest of breezes quickly kicks up swirling sand under those hot and dry conditions. There is also no chance of seeing aircraft taxiing to or from the operational runway. Atmospheric conditions were hazy and for the most part of the afternoon the distant skyscrapers of Dubai city were barely visible against the skyline. Thankfully the sun is positioned directly behind the spectator throughout the afternoon.

I found it worthwhile to take up position on the grandstand a little bit early. Not only does this afford a good choice of seat but it also offers the odd take off and/or landing of aircraft which do not form part of the actual display, for example on Tuesday a UAE Chinook was orbiting around while on Wednesday a French Air Force designated A400M (civil register F-RBAG) made an impromptu display which was not listed on the programme.

I would like to take the opportunity to once again thank all the team at Skyview for their hospitality and help on both days of the show we attended. Had it not been for their kind assistance and the lift which they provided we would probably still be waiting for a taxi a week later.

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A single Al Fursan MB-339NAT (UAE) above and the Team (main image) Super Mushak (Pakistan AF) below.









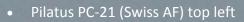




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- Dassault Mirage 2000-9 (UAEAF) bottom left
- Boeing B-1B Lancer (USAF) top right
- Lockheed Martin F-22 Raptor (USAF) bottom right







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As close as you can get without being at an air show!

