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A-7 retirement ceremony at Araxos Air Base, Greece

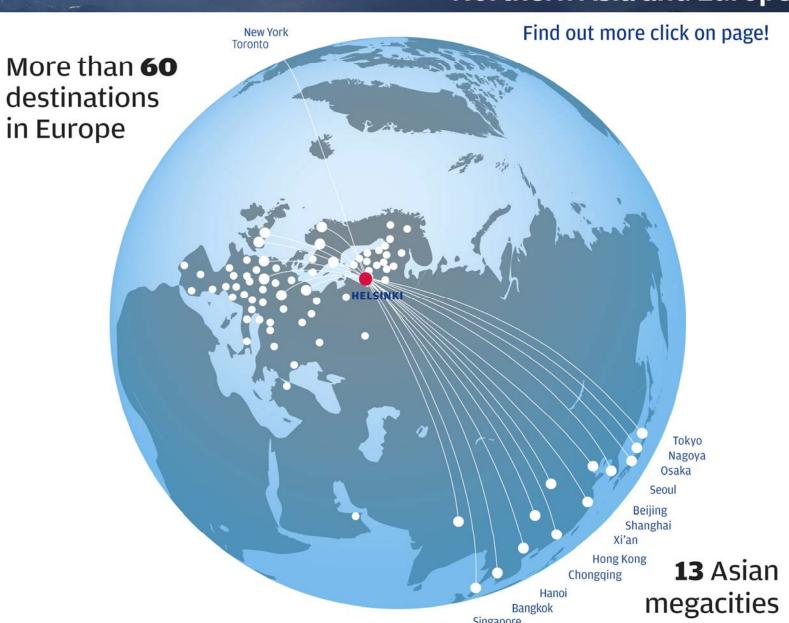
Pima Air & Space Museum, Tucson, AZ

Nellis AFB Open House, NV

And so much more...

The Best Air Show of 2014 Award





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THE AVIATION MAGAZINE formerly The Magazine is published six times a year. It is available for a FREE download from our website www.theAviationMagazine.com in Acrobat.pdf format. 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 e-magazine format since 2009, bringing exclusive interviews and fascinating reports to our global aviation enthusiasts digitally.

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Welcome to our February-March issue of **THE AVIATION MAGAZINE**. Throughout the winter, we been working hard to bring our readers additional features that will enhance their reading experience.

We have teamed up with Flight Video and Photos from Italy, to bring you videos of air shows and aviation events from Europe as well as additional reports. We will also have a segment on recommended photographic gear such as lenses and cameras that will help your aviation photography to be outstanding.

We finally awarded our prestigious and highly coveted annual BEST of the Air Show Season Award. For 2015 we look forward to attending air shows and military exercises worldwide. We have ambitious plans of course, and we hope we can fulfill many of them. But, we need your support by spreading the name of our excellent publications to all your friends, and supporting by advertising and by purchasing our patches and zap stickers to keep **THE AVIATION MAGAZINE** free.

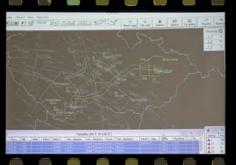


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Report and











Opening speeches by the officers in charge Map of the exercise area

AJTS logo

AAJTS-simulator

Aero L-39 inside the AB

The Czech Republic hosted the AMPLE STRIKE 2014 tactical exercise between September 3-15, 2014 The main base used for this exercise was the No. 22 Helicopter Base at Náměšť nad Oslavou. The participants came from 12 different NATO members supported by the NATO HQ AIRCOM at Ramstein AB, Germany. In total there were some 1400 troops employed together with approximately 30 aircraft and helicopters. Additionally the Czech Army supported the AMPLE STRIKE exercise with ground troops and artillery.

The main goal of the exercise was to train pilots and Forward Air Controllers (FAC) for preparing and coordinating tactical air operations to support ground operations. The host country offers a perfect environment in case of its military training grounds like Boletice, Libava and Bechyne for an ambitious training for future Forward Air Controllers. The whole exercise was based on the actual experience gained by several member countries in Afghanistan, Iraq and Libya.

Participating in the exercises included from the Slovak Air Force two Mil Mi – 17 NATO codename "Hip", two Aero L-39 CM and additionally two Aero L-39 ZAM to Náměšť. Of great interest (at least for the press and the aviation enthusiast) was a Lithuanian L-39ZA, which is rarely seen outside Lithuania. Especially as the Lithuanian air surveillance is, due to a lack of a potent local air force, mainly covered by other NATO members. Due to bad weather conditions in Germany six US Army Boeing AH-64D APACHE LONGBOW attack helicopter arrived a day later from their base at Illesheim (12th Combat Aviation Brigade). Together with Czech AF Mil Mi-24/35 as well as Mil Mi-17 / 171Sh the AH-64D formed a powerful air to ground force. On the first day the operational head of the exercise, Colonel Miroslav Svoboda, received every foreign crew personally.

For air surveillance as well as for the ground attack role in the training area the Czech Air Force employed SAAB JAS 39 GRIPEN, Aero L-159 ALCA and the older L-39 all coming from the Tactical Air Force Base Caslav. They were supported by USAF in form of six Lockheed Martin F-16 C/D from the Aviano based 510th Fighter Squadron, 31st Fighter Wing. The F-16s were sent to the Polish Air Force base at Lask, where they operated together with Polish Fighting Falcons. The logistic support was provided by Czech AF CASA C-295M from Caslav AB.

The Namest nad Oslavou Air Base was very busy during the whole exercise. The US Army built up a huge container and tent camp at the western side of the base close to where the Apache Helicopter were parked. Inside these containers were the Ops and briefing rooms. Additionally there was a provisional Ops room for the air surveillance installed by the Czech Air Force. In case of the training for the Forward Air Controller there was an AAJTS-simulator (Air National Guard Advanced Joint Terminal Attack Controller Training System) installed. The very first prototype of this sophisticated simulator was initially

used during the Ramstein Rover 2013 exercise, which also took place at Náměšť. This particular simulator with its 5 m wide cupola looks very much like a mini IMAX cinema. In it the trainees are completely integrated in a virtual battlefield scenario. The weather conditions during the exercise were far from being perfect, still most of the planned operations could be executed. According to Colonel Svoboda the amount of night missions were reduced to a minimum. Still the number of missions showed the huge intensity of the exercise. On some days more than 30 mission scenarios were organized and conducted, the Forward Air Controller had to deal with some 140 real and up to 40 simulated targets. This means a daily rate of up to 50 missions for the pilots and their aircraft where they accumulated some 60 flying hours per day! It was not only the air component who were quite busy but also the ground forces, for instance on September 11th a military convoy came under (simulated) attack. The FAC in charge requested artillery support, which was done by the magnificent Czech 152mm DANA self-propelled howitzer, which was located only 7 kms away from the battlefield. Just a few minutes after the artillery fire support the Aero L-159s dropped their ordnance and what was left of the "enemy" was later on finished by Boeing AH-64 APACHE – well done!

There is no operation without proper maintenance and ground support. As in the real world there were plenty of things to do for everybody involved, like the airport fire fighters, who, beside their regular job, had their own part in the exercises.

On September 10th, the Force commander of AIRCOM at Ramsteim AB, General Frank Gorenc, took part in the exercise together with the Chief of Staff of the Czech Army, General Petr Pavel and the Czech Air Force Commander Brigadier General Libor Stefanek. Together with Colonel Svoboda they held a press conference in the afternoon, where Brig. Gen. Stefanek praised the capabilities of the FAC's and especially the good teamwork of all participants. According to Brig. Gen. Stefanek. "The main goal must always be the perfect team coordination between the air and the ground components, this is why the exercise attaches so much importance in the training" When Gen. Gorenc was asked if it will be difficult for the USAF in the near future after the retirement of the Fairchild A-10 THUNDERBOLT II he said: "We Americans love our A-10, yes, the A-10 provided us as well as our allies over the years with a remarkable performance, still also this system has its date of expiry. Meanwhile we have developed and tested more modern weapon systems which are able to replace the A-10 completely!" At the end of his speech Gen. Gorenc thanked his Czech colleagues for their support which made this exercise highly successful.

General Petr Pavel and General Libor Stefanik mentioned the advantages of this exercise for the Czech Armed Forces. The huge complexity of this manoever required a high degree of effectiveness, which can not only be used within military operations but also for future humanitarian missions.

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Unfortunately the final ceremony had to be cancelled due to the bad weather conditions. Instead a small festivity was organised in Náměšť nad Oslavou which officially ended the AMPLE STRIKE 2014 exercise on September 15, 2014.

We would like to thank all the liaison officers of the HQ AIRCOM at Ramstein AB as well as Major Magdalena Dvorakova from the General Staff of the Czech Armed Forces for their great hospitality and their support during the exercise.

- Lithuanian L-39ZA left top
- Slovak AF (2) Aero L-39 CM and (2) Aero L-39 ZAM left bottom
- Czech AF Mil Mi-24/35 right top
- Slovak AF Mil Mi 17 right mid
- US Army offices during the exercise and the AH-64D APACHE LONGBOW attack helicopters, filmstrip.













□ 10A 11 □ 11A 12 □ 12A 13 □ 13A 14A □ 14A 15 □ 15A 16 □ 16A

Wings Over Wine Country Air Show Report and photography by Norman A. Graf

North American B-25J Mitchell "Old Glory"

"Wings Over Wine Country," the Pacific Coast Air Museum's annual air show, took place September 20-21, 2014 at the Charles M. Schulz – Sonoma County Airport. Both its date (a month later than last year) and its location (at the south end of the airport, closer to the museum) were changed this year. The highlight of the show was the first appearance here of the MV-22 Osprey. Sadly, the continuing effects of the budget sequestration process were noted in the absence of other U.S. military aircraft. The flybys by the U-2 and T-38s from nearby Beale AFB, once a standard at this show, were sorely missed. The Canadians, however, did send two RCAF T-6A Texan II trainers which appeared on static display. The show also featured a number of aerobatic and warbird performances.

The venue this year shifted back to the southern end of the airport, close to the museum grounds. This were opened up, making the cockpits accessible to kids of all ages. Crew chiefs and volunteers were on hand to answer questions. A number of warbirds were also on static display prior to their flying performances. Military participation was limited to the MV-22 and two RCAF T-6 Texan IIs. The flightline was much shorter than that in recent years, but there was sufficient space between the chalets to set up folding chairs and get a good view of the action. Bleachers and box seats were available for an additional fee. The gates opened at 0900, but early birds had the option of purchasing a pancake breakfast which allowed access an hour earlier. The breakfast was served in the hangar through which stunt pilot Frank Tallman flew a Beech 18 in the movie "It's a Mad, Mad, Mad, Mad World." Saturday morning's weather was overcast with a low ceiling and the entertainment began with the local RC club flying some of their aircraft. This was followed by the local SWAT team putting on some demonstrations of their capabilities. A simulated hostage rescue saw the police team, accompanied by a K-9 unit, being airlifted in. The whole team, including the dog, was clipped to a rope suspended from a Bell 407 helicopter.

The flying demonstrations began shortly after noon, although the overcast had not yet lifted. A flight of four Nanchang CJ-6 aircraft performed a number of formation flybys including a missing man formation. This was followed by the warbirds. Although there was a nice selection of trainers, fighters and a bomber, the numbers were down significantly from last year's show. The airport began during World War II as a P-38 training Chino was an early-war F4U-1 Corsair. They were joined by a trio of local Mustangs, a Yak-11 The skies finally cleared and Jacquie B kicked it into high gear, putting on a very nice aerobatic demonstration in her bright red Extra 300. As she was finishing her routine Dan Buchanan "intruded" into the airbox, leading Jacquie to buzz him a few times. It was all in good fun, and it certainly gets the audience's attention. Dan soared through the bright blue skies, his orange hang glider and long streamers standing out brilliantly as he put on his demonstration. Next up was a flight of local civilian aircraft: a Stearman, Waco, radialengined Cessna 195 and a deHavilland Beaver floatplane. This was followed by a number of nice flybys by the DC-3 "Spirit of Benovia."

The aerobatics resumed with Frank "Dr. D" Donnelly flying a nice routine in his clipped-wing Taylorcraft. Greg "Wired" Colyer provided the only jet noise of the day, but impressed the crowd with his very energetic demonstration of the aerobatic capabilities of the T-33 Shooting Star "Ace Maker." The Red Bull helicopter was up next. Chuck Aaron is the only pilot licensed in North America to perform the maneuvers that the specially modified Red Bull MBB 105 is capable of doing.

The intimate setting of this air show allowed the spectators to enjoy the show close up and personal. He definitely is a hard act to follow, but the Marines of VMM-166 from MCAS Miramar were up to it. The highlight of the show was the inaugural appearance of the MV-22 at the Wings Over Wine Country air show. The speed flybys, transitioning flight as well as a display of the hovering capabilities. It was the perfect way to end the show.





Jacquie B in her EXTRA 300, above and Yak-11 "Blyak" below



MV-22, The "Sea Elks" VMM-166 from MCAS Miramar, below



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THE REDDING AIRSHOW

REPORT AND PHOTOGRAPHY BY NORMAN A. GRAF



The Redding Airshow, small as it is, has managed to attract a jet team for 19 out of the last 21 shows. But this year's appearance by the Canadian Forces Snowbirds was an on-again, off-again scheduling rollercoaster. The Snowbirds announced in December 2012 that they would be appearing this year, a schedule which was reaffirmed at ICAS in December 2013. However, in January of this year, budget constraints led to the cancellation of all US appearances. The RCAF CF-18 Demonstration Team was to take the place of the Snowbirds. However, in February the Snowbirds were on again. And that's how Redding became one of only a handful of US air shows to host the Snowbirds and the only US show to feature both the Snowbirds and CF-18.

The air show took place over the weekend of September 27-28 at Redding's Municipal Airport. In addition to the Canadian jets, a number of warbirds and aerobatic performers filled the skies of Northern California. On the ground were more aircraft on static display, including another Canadian visitor, the RCAF T-6 Texan II, along with vintage military vehicles and a classic car show. Rain earlier in the week had deposited snow on Mt Shasta and Lassen Peak, providing a beautiful backdrop to the day's flying. The gates opened at 0800 leaving plenty of time for visitors to position themselves along the flightline and check out all of the static aircraft and vehicles. Photographers had the option of purchasing a photo pass which allowed entry an hour earlier than general admission and also included entry into a photo pavilion located on the front line. For the first time, reserved seating as well as a reserved seating area with catered food and drinks (Flight Deck) was available for purchase. Announcer Steve Stavrakakis and Air Boss Willie Turner did a great job throughout the show, keeping the spectators informed and entertained. They handled both planned interruptions (the arrival and departures of SkyWest commercial flights) and unplanned disruptions (USFS smoke jumpers departing to fight a wildfire) in style.

The air show began with a parachutist bringing in the flag shortly after noon. John Collver started off the day's flying in his AT-6 Texan "War Dog." Julie Clark followed in her T-34 Mentor, with red, white and blue smoke trailing behind her. Greg Colyer upped the tempo, flying a fast routine in his T-33 Shooting Star. Then it was time for the warbirds. The Disabled American Veterans (DAV) Aviation Outreach Program, now in its twelfth year, participates in air shows throughout the country, using a World War II era B-25 bomber to increase public awareness of disabled veterans.

"Old Glory" was on static display during the morning at the DAV Flight Team display and now took to the skies. It put on a number of passes. It soon attracted the attention of the Commemorative Air Force's A6M3 Zero, which performed several strafing runs on the Mitchell. Soon enough the CAF's F6F Hellcat was airborne and after a spirited dogfight managed to "down" the Zero. A formation flight by all three of the Pacific Theater warbirds thrilled the crowds. Steve Hinton later flew a solo demonstration in the P-38J Lightning "23 Skidoo." Jacquie Warda put on an amazing demonstration in her EXTRA 300, showing what is possible in an aircraft designed especially for aerobatic flight. All eyes were on her bright red plane as she crisply and energetically went through her routine.

The highlights of the show, and what many had travelled a long distance to see, were the Canadians. Captain Adam Runge started it off in the CF-18. Rotating so sharply on takeoff that he almost banged the cans on the runway, "Manik" kept pushing the envelope throughout his show. His high-speed passes, high-g turns and rolls showed off all aspects of the beautifully decorated airframe. Each year's theme inspires a new paint scheme. "To the Stars – Fuelled by Legacy" celebrates the 90th anniversary of the RCAF.

The Snowbirds then took off in sections of three, forming up and performing their system checks in the distance. Saturday's blue skies and puffy white clouds formed the perfect backdrop for the brightly painted red and white Tutors. The nine pilots performed a variety of maneuvers in various combinations of aircraft, always smoothly transitioning from one pattern to the next. Saturday's performance was interrupted by the launch of a US Forest Service Sherpa carrying smoke jumpers to fight a wildfire, but the action picked up smoothly as soon as the box was clear again. The crowd clearly enjoyed the performance, cheering wildly during many of the high-action maneuvers such as the Lag Back Cross, but also enjoying the graceful nineship formation transitions. This year marks the 50th anniversary of the Tutor, and it just keeps getting better with age. After their performance the pilots came forward to the flightline to answer questions and sign autographs.

Thanks to the Exchange Club of Redding, the show organizers, sponsors and all of the staff and volunteers for making this such an enjoyable air show and to Michael Burke for arranging the media access.

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Anyone who has attended the MCAS Miramar Air Show in the past few years will immediately recognize the "Voice of MAGTF", Capt. John Reeves, announcing the exciting, fast-paced and explosive action of the Marine Air Ground Task Force. The air show staged a triumphant return after last year's last-minute cancelation, and the MAGTF, always an integral part of the show, took center stage this year: "Celebrating the Marine Air Ground Task Force (MAGTF)" was the theme for this year's three-day show, which took place October 3-5.

The schedule for each day's show was roughly the same. The gates opened to the public at 0800, the flying began an hour later and continued pretty much non-stop until 4PM. On Saturday there was a twilight show which started at 5:30PM and concluded with the "Great Wall of Fire" at 8:30PM. That's more than twelve hours of action and made for a long day! Especially with the sunny skies and triple-digit temperatures. Luckily there were lots of places to sit down: free open seating at each end of the flightline, numerous box seats, six massive sets of bleachers and a variety of public chalets providing shade and catered food and drinks. There were also many food and drink vendors distributed throughout the tarmac, most operated by base squadrons with proceeds going towards their morale and welfare funds.

This year's event featured two jet demonstration teams, the civilian Patriots and the Navy's Blue Angels, tactical demonstrations from the AV-8B Harrier II, MV-22 Osprey and the F-35B Lightning II, civilian aerobatic performers, two parachute teams, and, of course, the Marine Air Ground Task Force assault demonstration. Almost a mile of runway apron was filled with aircraft on static display. The ongoing budget sequestration limited the military static displays to local Marine Corps aircraft, but pretty much every aircraft in the inventory was represented, and Squadron's Row was well populated. The brand-new F-35B, however, attracted the lion's share of the crowd's interest. Hopefully the Air Force and Navy, represented this year only by the MQ-1 Predator and MQ-8B Fire Scout UAVs, will return in force next year. A pair of German Air Force Tornados and a US Coast Guard MH-60T Jayhawk rounded out the current armed forces aircraft on static display. The Flying Leathernecks Museum had almost all of their aircraft on display, giving visitors an opportunity to see aircraft representing the Marine Corps' long aviation history. There were also many private warbirds on display. Additionally, there were well over a hundred exhibits and booths featuring everything from Navy divers in a swim tank to M1 Abrams tanks. And everywhere were Marines, eager to interact with visitors and tell them what they do and why they do it. Indeed, this opportunity to interact with the Marines aboard the air station is one of the highlights of the show for many.

The flying schedule was the same each day, with the morning being devoted to civilian acts and the military performing in the afternoon. The Blue Angels concluded the afternoon's flying each day. The evening show also included a mix of civilian and military demonstrations. The AV-8B Harrier II tactical demotok place just as the sun was setting. Well after dark "Little Buddy" lit up the skies over





F/A-18C

This year also marked a first for MCAS Miramar: the Marine's newest fighter aircraft, the F-35B Lightning II, made its inaugural appearance at the air show. The tactical demonstration was performed by Lt. Col. Steve Gillette, commander of VMFA-121 "Green Knights," the first operational F-35B squadron. Flying in from MCAS Yuma, he slowed the Lightning II, opened a multitude of doors, swivelled its vector-thrust exhaust and hovered over the runway. After a number of maneuvers and flybys, Lt.Col. Gillette landed the aircraft. He later took off using afterburner and returned to MCAS Yuma.

Fat Albert had been grounded most of the summer after a birdstrike damaged its wing leading edge: "Must have been a pterodacty!" quipped air show announcer Rob Reider. Its return to service was greeted by cheers from the crowd. The Blue Angels put on their full high show all three days, delighting the huge crowds which had by now filled the bleachers and flightline seating areas.

It is estimated that a half million visitors came aboard the air station to attend the show. But for those unable to attend, the media coverage of this air show is phenomenal, with Marines providing real-time video streams, uploads to DVIDS and posts to Twitter and Facebook. 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.



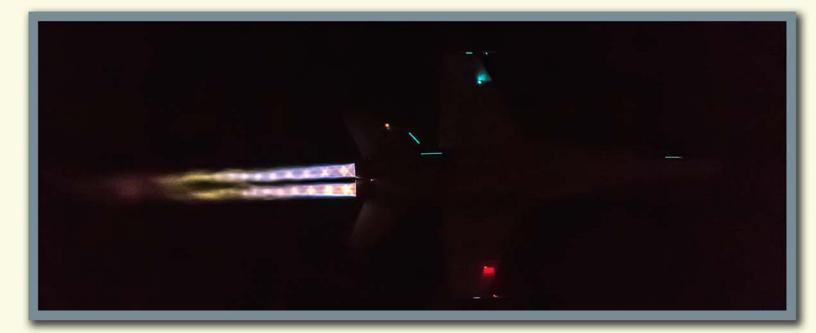


Fat Albert at 309th AMARG, in Tucson Arizona, being overhauled. ©2014 The Aviation Magazine



KC-130J Hercules tanker trailing two CH-53s and MV-22 above, UH-1Y Venom and an AH-1 Super Cobra, below.





Miramar with an incredible series of afterburner passes in the F/A-18C. A fireworks display set to the stirring music of John Philip Sousa set the stage for the concluding act: the Great Wall of Fire.

But the highlight of the show was clearly the MAGTF. Two incredible explosions marked the beginning of the demonstration, simulating ground bombardment from offshore naval vessels. The action is explained by the dynamic and over-the-top narration of Capt. John Reeves, accompanied by a hard-driving rock music sound-track. Soon the skies were filled with a multitude of aircraft, both fixed-wing (jet and prop) and rotary (helicopter and tilt-rotor). Two KC-130J Hercules tankers passed overhead, the first refueling two pairs of AV-8Bs and F/A-18Cs, the next trailing two pairs of CH-53s and MV-22s. The Hornets and Harriers then made several high-speed strafing and bombing passes, accompanied by loud and showy pyrotechnics. Two UH-1Y Hueys soon appeared with Marines fast-roping to the ground to the strains of "It's raining men! Hallelujah, it's raining men" by the Weather Girls. All the while Super Cobras were darting about providing cover.





Fireworks display

Marines in action

Humvee

M1A1 Abrams tank

The advance team then clipped on to a rope dangling from a Huey and the eight Marines were extracted and flown through the sky. Three Ospreys made a high-speed pass, transitioned to hovering flight, then descended to deliver their loads of infantry. Then it was time for the aptly named "Heavy Haulers" to bring in the mechanized equipment. Three CH-53E Super Stallions, one with a Humvee dangling below it, delivered their loads. The Marines on the ground slowly advanced towards the crowd line, all the while providing each other cover. From show right soon appeared an armored column led by two M1A1 Abrams tanks and followed by several LAV-25s, Humvees and an MTVR 7-ton truck towing a howitzer. Two final passes by the Hornets and Harriers, each accompanied by a wall of fire, ended the assault demo. Now it was time for the pass in review, where all of the ground assets paraded within arm's reach along the crowd line, and the aircraft flew slowly overhead. The Marines were heartily cheered by the crowds and they, in turn, exchanged high-fives and handshakes with the spectators. It is truly one of the highlights of the show and a demonstration seen very rarely elsewhere.

A bittersweet moment for many in the crowd was the final flight of the CH-46E, also known as the "Phrog." "The Marine Corps is about to be out of the Phrog business and that seems sad; however, it is also an exciting time as we complete the transition to the more capable MV-22 and prepare to write the next chapter in the great legacy of Marine aviation," said Lt. Col. John Field, Marine Medium Helicopter Squadron (HMM) 364 commanding officer. "The machine changes, but the Marines are still going to do the same mission, whether it's 46s in Vietnam or Ospreys in places to be named later, carrying that culture and that legacy into the new airframe." The Sea Knight entered service with the Marines fifty years ago in Vietnam and has served in every major engagement since. A flight of four CH-46Es, the lead ship painted in the markings it carried in Vietnam, concluded the MAGTF. "It is a good way for the squadron to retire the aircraft by flying one more pass for the American public to see," said Capt. Brett Bishop, a Phrog pilot with HMM-364.



(4) CH-46E Sea Knights, one with special paint.



(4) CIT-40L Sea Killgitts, One With special paint.

23







Lt. Col. Steve Gillette, commander of VMFA-121 "GREEN KNIGHTS" in the F-35B















It was fantastic to have the Blue Angels back in the Bay Area! Last year's Fleet Week celebrations were canceled due to cuts in federal funding and although the budget sequestration remains in effect, and military participation was limited to the Navy's Blue Angels and Leap Frogs, it was a real pleasure to see the air show return to San Francisco. This year the only threat to a successful show was the weather, and even when Karl the Fog made an impressive appearance on Saturday, the air boss was able to shuffle the schedule sufficiently that the show went on.

The Parade of Ships took place on Friday, which usually only features the rehearsal flights. The USS America was commissioned on Saturday morning, causing this change of plans. The parade included warships from the US and Canadian Navies as well as US Coast Guard vessels, all accompanied by a fireship spouting fountains of water. The actual practice flights were rather sparse. The Patriots, being the local team, didn't need to familiarize themselves with the airspace. And the Blue Angels, after making several flat passes over the fog, called it off and headed back to land. Also different this year, they staged out of Oakland Airport instead of SFO.

On Saturday, the appearance of the massive inflow of marine-layer fog disrupted the schedule of flying, but the organizers did a very good job of shuffling the acts to make the best of it. Surprisingly enough, this meant that the Blue Angels flew earlier than scheduled and did not end the show as they normally do. On Sunday conditions were perfect for all of the performers. The day dawned bright, clear and cool with seas so calm that the Golden Gate Bridge was reflected in the Bay. The show was opened by the US Navy Parachute Demonstration Team jumping from a Missouri Air Guard C-130. The "Leap Frogs" performed their usual highenergy display, finishing with the unfurling of a huge American flag. The US Coast Guard then put on a display of their Search and Rescue capabilities. After dropping a rescue swimmer into the Bay, the MH-65 Dolphin helicopter departed, then circled around, zeroed in on the smoke from a bright red flare and lifted the swimmer back into the helicopter. They repeated the demonstration for viewers at the eastern end

of the air show box.

The Horsemen started off the day's aerobatic flying, putting on an amazing display of precision formation flying in their three highly-polished P-51D Mustangs. Steve Hinton led Ed Shipley and Dan Friedkin through a beautiful series of graceful loops and rolls. "Super Dave" Mathieson turned it up a notch with a spirited performance in the Scheyden MX-2. He was followed by Michael Wiskus who flew a similarly energetic routine in the bright red Lucas Oil biplane. Then it was time for the first of the day's two jet teams. The locally-based Patriots Jet Team is the largest civilian-owned jet demonstration team and includes former Blue Angels, Thunderbirds and Snowbirds among its six pilots. Their fast-paced, precision maneuvers contain many of the same exciting elements as those military teams. You can read about our flight with the Patriots in the December 2014 / January 2015 issue of The Aviation Magazine. In addition to entertaining viewers at air shows, the Patriots also encourage students to study science, technology, engineering and mathematics through their new, all-volunteer non-profit organization The Patriots Jet Team Foundation.

United Airlines sent a wide-body Boeing passenger jet each day to perform a number of flybys: a 757 on Friday, a 747 on Saturday and a Triple-7 on Sunday. Although none of the maneuvers were as spectacular as Tex Johnston's legendary barrel roll of the Dash 80 over Lake Washington in Seattle almost sixty years ago, it was nevertheless impressive to see these large jets fly low over the Bay, especially during their slow dirty passes with gear and flaps fully extended. Sean D Tucker once again amazed the crowd with his high-octane, jaw-dropping aerobatic routine at Fleet Week. The only thing missing from his astounding repertoire was the triple-ribbon cut. The Oracle Challenger III biplane stood out brightly in the clear blue skies and even at a distance his smoke system allowed spectators to follow his every move. Well, almost: his snap-rolls came so fast and furious it is easy to lose count. And he disappeared into his own smoke during the extended tail slides and double-hammerhead turns. He ended his show with a hovering tribute to the AV-8B Harrier followed by a low photo pass seemingly just inches over the waves.

"Fat Albert", with its all-Marine crew, was a welcome sight. The brightly painted C-130 performed its usual steep climb and descent to open and close its demonstration, with a number of remarkable passes in between. There was enough moisture in the air that the prop tips left spirals of vapor behind them as the large transport clawed its way skyward. The final low pass over Alcatraz Island directly towards the city's waterfront brought gasps from the crowds.

The Blue Angels closed the show, putting on their high show under bright blue skies. They had been buzzing the area for several days to orient themselves and identify timing and location landmarks. The crowds were nevertheless thrilled by the team's dramatic entrance into the aerobatic box flying in low over the Golden Gate Bridge. Their full high show on Sunday was a sight to see. It is a challenge to photograph the low passes in between the masts of the many boats crowding the bay, but it is worth it to see #5's sneak pass just feet over the water. Angel Island provided the perfect background to make visible the Schlieren lines formed by the shock cones as Lt. Cmdr. David Tickle approached Mach 1. Similarly, Alcatraz Island formed a nice backdrop to the many exciting solo crosses. Although the ground portion of the Blue Angels' performance was missing from this show, the team came out to Pier 39 on Saturday night to meet their many fans, answer questions and sign autographs.

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's zones, as well as pavilions with chairs, shade and catered food for those willing to pay for the comfort and convenience. But 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!







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Report and photography by Peter Thivessen and Wolfgang Jarisch

The second part of the multinational exercise JOINT WARRIOR took place between 6 and 17 October, 2014 on the beautiful Scottish coast line. In total 53 aircraft, 22 warships and submarines and more than 3.500 men and women were involved in the JW 14-2 (the official acronym in common use).

For those who are not familiar with JW, Joint Warrior is a UK tri-Service multinational exercise that involves numerous warships, aircraft, marines and troops. Joint Warrior provides a complex environment in which UK, NATO and allied units can go through training together in tactics and skills for use in a combined joint task force. The exercise runs through a range of scenarios, including crisis and conflict situations, that could be realistically encountered in operations - disputed territory, terrorist activity, piracy and more. This massive multinational exercise delivers specialist maritime training, bringing together the theatres of air, surface, underwater and amphibious forces.

The planning for this massive exercise was done by the Joint Tactical Exercise Planning Staff (JTEPS) with their headquarter in Northwood. Squadron Leader Duncan Laisny, responsible for the planning and the coordination of the air ops made it clear by saying: "this exercise, with its various realistic scenarios, gives us the chance to centralize and strengthen the expertises of the particular armed forces".





Typhoon FGR4 from 29.SQN Coningsby

RAF Lossiemouth acted as the main base for fast jet operations. As RAF Leuchars closed its gates the year before No. 1 and No. 6 Sqn relocated their EUROFIGTHER TYPHOON FGR.Mk 4 to Lossiemouth, which made it the sole active (flying) RAF base in Scotland. The initial plan saw a wide range of aircraft from different air forces, such as the Canadian Lockheed CP-140 AURORA, US Navy Lockheed P-3C ORION as well as one of the brand new Boeing P-8 POSEIDON, German PANAVIA TORNADO IDS, Swedish SAAB JAS-39 GRIPEN, Belgian Lockheed Martin F-16 MLU and the Boeing F/A-18C from the US Marine Corps. As the amount of participants exceeded by far the capability of RAF Lossiemouth, the surveillance and RECCE aircraft had be relocated to other air bases. Due to the actual political situation in Syria and Iraq the Belgian Air Component as well as the US Marine Corps had to cancel their attendance on short notice. Still there was a lot of rush at Lossiemouth during these eleven days of operation. At least three sorties were flown at an average per day, always dependent on the weather conditions.

The station commander of RAF Lossiemouth, Group Captain Mark Chappel, ADC, RAF, welcomed the representatives from media on the press day and introduced squadron leaders and liaison officers of the different units to the journalists. Being asked how the Swedes got along with the Scottish weather, Lt. Col. Adam Nelson (Flygvapnet) said with a smile on his face "the tough people

from the North have their own bad weather, but, honestly, in Scotland it is worse!" Squadron leader Kai Peters from the German Taktisches Luftwaffengeschwader 51 "Immelmann" (TaktLwG 51 "I") stated "it is not a big problem for me and my crews, as the weather in Northern Germany is very similar". The No. XV (Reserve) Squadron commander, Wing Commander Jon Nixon mentioned "how important it is for them to work closely together with German Tornado units and share their experiences. These exercises enable us not only to master the challenges of the daily flying routine but also to keep the venerable Tornados airworthy for a long period. In these exercises one can clearly see the potential of this weapon system."

The members of the media got a good chance to watch the final preparations for take off on the last chance positions of the air base from a very close range. Several British TORNADOS Gr.Mk. 4 as well as their German equivalent (IDS = Interdiction/Strike) and Swedish JAS-39 GRIPEN could be seen. Additionally there was a chance to watch the daily operation routines of the No. 6 Squadron (Eurofighter TYPHOON FGR.Mk 4). All aircraft were placed in an exact line, which reflected their professionalism. The entire ground crew did a very good job, which was clearly seen in the appearance of the aircraft as well as the hangar.

Beside the busy flight operations within the exercise the normal (daily) flight operation had also to be handled smoothly by the flight ops and the air controller. Several BAe Hawk T.Mk 1a from different units (RAF as well as RN) came in to land to be refuelled. A lone SAAB Tp 100C (military variant of the SAAB 340) came in as well without interfering with any of the activities on the ground or in the air. The QRA (Quick Reaction Alert), which RAF Lossiemouth is responsible for (to cover the Northern part of the United Kingdom), was also maintained by the RAF's crew, which shows the professionalism of the men and women in charge.

We would like to thank the British Ministry of Defense for inviting us to the JOINT WARRIOR 2014-2 exercise. Our special thanks goes to Flying Officer Martin Walker and Flight Lieutenant Chester Myers for their great support and hospitality and of course Wing Commander Jon Nixon from No XV (R) Sqn as well as Flight Lieutenant Bruce McComor from No. 6 Squadron for their assistance and help during our visit.



German Tornado TakLwG 51 "Immelmann

















- RAF Puma HC2, above
- RAF Sea King HAR3 SAR to the right
- A pair of BAE Hawk T 1A below





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the serial numbers. Everybody could take plenty of photos from the long row of decommissioned A-7 and the still operational aircraft as well.

In the morning as well as in the afternoon the pilots and the ground crews prepared themselves for the fly out ceremony on the very next day. One could see the tension and the impression on the faces of the pilots and the ground crew. Maybe not everybody has already realised, that it will be the very end of the A-7 Corsairs career. No matter what, on this particular day there was plenty of flying and the photographers had more than one opportunity to take great shots from the A-7 during the start up procedures of each aircraft, on the taxiway and on the last chance position. Also many of the ground crew members took their chance to take a last picture from the A-7, their comrades and, of course, of themselves with their pocket cams. One crew member was even dressed as a buccaneer, much to the delight of the spectators, who could take a very special shot from this scene. Beside all the rehearsals and the preparation for the fly-out event the Lockheed Martin F-16 from the No. 335 Sqn. did their daily job, the great ZEUS Demo team did some rehearsals as well as the T-6 Demo Team Daedalus. This day became unforgettable

A-7 retirement ceremony at Araxos Air Base: the end of a legend

On October 17th, 2014 an era ended in the Southern part of Europe. The Hellenic Air Force retired its Ling Temco Vought (LTV) A-7 CORSAIR after 39 years in operational service. The HAF was the last operator of this ground attack aircraft. The A-7's final deployment (outside Greece) took place at the Royal International Air Tattoo 2014 at RAF Fairford, where the retirement ceremony was officially announced by the crew. All kind of enthusiasts, plane spotters but also aviation journalists would get a last chance to say good bye to the Last Corsair's of the Universe, as the A-7's were unofficially called within the Hellenic Air Force. Of course we took the chance to take part in this event.

A nice surprise was announced by the HAF, which offered all accredited media and aviation spotters a very special access to the A-7's home base (Araxos AB) the day before the official retirement ceremony took place. Everybody got a chance to see the A-7 CORSAIR for an additional day and was able to watch additionally the normal daily routine on this HAF operational base. This was particularly of interest for the huge amount of aviation enthusiasts, aviation spotters and for those who are collecting

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for everybody involved and finally, one was pleased to see a very rare Embraer ERJ-135.

On the next day the base was open for the general public to get a chance to see the venerable A-7 for the last time in the air. In one of the hangars, which was solemnly decorated, one A-7 was placed into the corner, covered from the curious eyes of the public by a blue fabric. When the Greek Minister of Defence, Dimitris Avramopoulos, arrived in his limousine and inspected the guard of honour, the festivities could officially start. Beside the Minister of Defence, there were plenty of high ranking military as well as civilian dignitaries present; the Chief of Staff of the Hellenic Air Force, Lieutenant General Evangelos Tournas, the Commander in Chief of the Hellenic Armed Forces, General Mikhail Kostarakos, Vice Admiral Evangelos Apostolakis, the Deputy Minister of Defence loannis Lampropoulos, among others. Lieutenant General (ret.) Antonios Iordanou honoured all those who served with the A-7 since 1975. In his speech he said, that the A-7 made a big contribution to the National security for almost 40 years. Then the blue fabric was taken off from the A-7 in the corner and everybody could see a brand newly applied beautiful colour scheme (grey-silver) with all five squadron emblems on the tail.

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The Minister of Defence, Dimitris Avramopoulos said in his speech, that this is a very special day in the history of the Hellenic Air Force. Like the previous speaker he thanked all crews and technicians who worked and served with the Corsair for their outstanding job. He mentioned that the decommissioning of the A-7 is not only a farewell for the Hellenic Air Force but also for all aviation enthusiast of which many had come to Greece to join the celebrations. He also honoured the 13 causalities who gave their life while flying the A-7. During his speech a two-ship formation made the final fly by.

According to the HAF's Chief of Staff, Lieutenant General Evangelos Tournas, the retirement of the A-7 will leave no gap, but will be succeeded by the much more modern Lockheed Martin F-16 Block 52+, which currently represents the most advanced version of the F-16 series.

At the end of the ceremony everybody moved towards the crowd line just to watch a unique formation consisting of one TA-7C Corsair, a Mirage 2000-5EG, a McDonnell Douglas F-4E Phantom II as well as a Lockheed Martin F-16 Block 52+. The A-7 left the formation in a steep climb and made then the final landing of this type. The flying displays of the ZEUS Team (F-16 Demo) and the Daedalus Team (T-6 Texan II) completed the farewell ceremony. After a total of 440.000 flying hours the Greek LTV A-7 Corsair's service life came to its end!

Our thanks go to all men and women of the Hellenic Air Force for a perfect organization, especially to Col. Alexandros Marinos and the whole ground crew who made our visit so successful. Very special thanks goes to Mag. Elfriede Nikolakopoulou-Pirzl, from the Austrian Embassy in Greece, for her generous support.

LING TEMCO VOUGHT A-7 CORSAIR (History)

In 1963 the US Navy announced a request for proposal for a replacement of the already outdated Douglas A-4 SKYHAWK. As a cost saving measurement it was agreed that the new carrier based ground attack aircraft shall be based on an already existing type. The participating companies were Grumman, Ling Temco Vought (LTV), McDonnell Douglas and North American. In November 1963 the company LTV was presented as the winner. This company persuaded the Navy officials as the new carrier born attack aircraft shall be based on the highly successful LTV F-8 Crusader. Only a few months later (March 1964) a contract was signed for three prototypes, four preproduction aircraft and the first batch of (35) serial production aircraft. The new aircraft was designed with a short but more bulky fuselage and would receive the name A-7 Corsair II – in honor of the legendary F-4U Corsair from WWII.



The first prototype (serial # 152580) had its maiden flight on September 27, 1965 in Dallas, Texas. Beside the US Navy, US Air Force and some units of the Air National Guard, the A-7 was operated by the Air Forces of Thailand, Portugal and last but not least Greece (the Hellenic Air Force was the only foreign operator who purchased brand new aircraft, Thailand as well as Portugal received second hand machines from the US Navy).

On June 20, 1974 the Greek Government signed a contract for the purchase of (60) A-7H. The H-model was a modified A-7E adapted to the HAF's requirements. Some of these modifications were related to the landing gear others for the fuel system. In case of the avionics the H-Model was identical with the E-Model, inclusively the HUD, which was used for the first time in a military aircraft. The air refueling probe-system was dispensed. The very first A-7H had its maiden flight on May, 5th 1975 (serial # 159662). Only three months later the first two A-7H (some sources claim three aircraft) landed on Adravida AB, home of the 115th Combat Wing at Souda. The ferry flights were executed by the US Navy personnel and Skyways Company a civilian contractor. The delivery of the other aircraft was delayed due to construction work on the air bases runway, this is why the rest of the other aircraft landed finally on 28th November 1975 and were welcomed in a ceremony by the former Hellenic Air Force Chief of Staff, the American Ambassador and US-Navy representatives. In January 1980 another contract was signed to purchase five TA-7H double seaters. This particular aircraft was very similar to the US Navy version (TA-7C) but was equipped with the upgraded TF-41-A2 engine. The maiden flight of the first aircraft took place on 4th March 1980 (serial # 161218), on the ferry flights to Greece (July, 11, 1980 and October 28, 1980) by Greek pilots.

In the early 1990s a further (50) surplus A-7E and (18) TA-7E were purchased to replace the Lockheed F-104 Starfighter within the Hellenic Air Force. Many of these Corsairs saw active service in conflicts from Vietnam, Libya, Lebanon to the first Iraq war. These aircraft were completely overhauled before being sold to the HAF. The first aircraft of this batch landed in Greece on April, 3, 1993, all together (36) A-7s flew in, the rest were delivered in sea containers and after arrival were assembled by the Hellenic Aircraft Industry.

Units operating the A-7:

- No. 340 Bomb Squadron, 115 Combat Wing, Adravida AB, Souda. This unit started the pilot training and the training for the ground crews at the end of 1975. On January 30, 2001 this unit was disbanded and the remaining aircraft were transferred to the 345 Bomb Squadron.
- No 345 Bomb Squadron, 115 Combat Wing, Adravida AB, Souda. Commissioned in 1976, decommissioned in 2002.
- No 347 Bomb Squadron, 110 Combat Wing, Larissa AB. Commissioned in 1977, decommissioned in 1992
- No 335 Bomb Squadron, Araxos AB. Commissioned in 1992, decommissioned in 2008.
- No 336 Bomb Squadron, Araxos AB. Commissioned in 1993. the No 336 Sqn. was the largest and final operator of A-7's within the HAF. In 2002 (98) aircraft were listed under its roster.



Filmstrip #1&2 L to R: Lieutenant General (HAF) Evangelos Tournas, Chief, Hellenic Air Force General Staff, Minister of National Defence (former, as of Oct. 31) Dimitrios Avramopoulos, General (Army) Mikhail Kostarakos Chief, Hellenic National Defence General Staff, #3 Col (HAF) Petros Hatziris #4 Col (HAF) Panagiotis Farfaras

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Fly past of (3) TA-7Cs above and an TA-7C taking off for the last time, below.





A unique formation consisting of one of each: TA-7C, Mirage 2000-5EG, F-4E Phantom II and Lockheed Martin F-16 Block 52+, above. The F-16 ZEUS Demo Team, below.



1963-2013

T-6 Texan II Demo Team Daedalus, above. Embraer ERJ-135, middle. The final resting place of the A-7's, bottom.



THE AVIATION MAGAZINE

"THIS IS US" - SOFIA AIR SHOW 2014 Report by Ruggero Piccoli and with images by Alberto Celsan



On October 11th, Sofia-Vrazhdebna International Airport, Bulgaria, hosted for the first time in 20 years a military air show, organized by the Bulgarian Air Force to celebrate the 102nd anniversary of the Air Force. Whose foundation dates back to 1912, when on October 16th an Albatross F-2 biplane flew a reconnaissance mission over Adrianople, the first military mission carried out by Bulgarian Air Force.

The air show was called "This Is Us" and during two hours of displays the Air Force demonstrated its capabilities, showing both in the air and on the ground almost all types of aircraft currently on active duty.

Static display was located in the north area of the airport, where the public could come into contact with military personnel and equipments: radar and anti-aircraft missile systems, fighters such as MiG-21, MiG-29, the one showing the 25th year of service marks, and Su-25, PC-9M and L-39ZA trainers, A-109E, AW-139 and "Cougar" helicopters, and all the transport aircraft based on this airport, An-30, C-27J, PC-12M, An-2, the only one still kept in flying condition due to its good characteristics as a paratroopers launch platform, L-410UVP-E and An-26, which was replaced by the new C-27Js three years ago.

The flying display was opened by paratroopers launched from a C-27J. The first flypast was performed by helicopters, from 24th Air Base Krumovo, in wedge formation led by a Mi-17 flanked by two Cougars and two Bell 206s, followed by a Mi-17 showing fire-fighting manouver with water release through "Bambi Tank" system. Bell 206s split from main formation and exhibited a perfectly synchronized show. While a Mi-17 provided air coverage over the airport, two Cougars demonstrated their tasks: search and rescue, tactical special force landing with "fast rope" technique, evacuation of wounded using the stretcher and final extraction of troops. In the coming months Air Force will receive two new Bell 206s as well as two new AS532ALs.

Two Alenia C-27J Spartans arrived in a low altitude tight formation. Just based on Sofia Airport, they showed two high speed opposite crosses, hard banks and high G's number manoeuvres. With an amazing display they proved the manageability and the agility of the new transport even at low altitudes useful to avoid enemy antiaircraft defences in operational missions.

Flight school was represented by instructors coming from Dolna Mitropolia Air Base. They flew complex aerobatics, first the solo performance of a PC-9M and then a pair of L-39ZA that exhibited both in pair and in solo. The jet-trainer, retired from service a few years ago, has been reintroduced into the air force's flying school at the end of 2013. Returned back into service at the end of March at the Graf-Ignatievo Air Base after one year of inactivity, MiG-21bis opened the part of the show dedicated to fast-jets. Two fighters provided air coverage over the airfield showing basic combat manoeuvres filling the air with the sound of afterburners .

Two Su-25s simulated ground target attack on the field with a series of tactical manoeuvres, high-G turns, deep dives and low passes, both in pair and in solo, giving a demonstration of the good agility of the Russian attack fighter. Su-25s are temporarily based at Graf-Ignatievo as Bezmer Air Base is under reconstruction in order to extend the runway, realize wider taxi ways and create a new ramp in order to meet NATO standards.

Final part of the air show saw two MiG-29s chasing each other in a spectacular simulated dog-fight at low altitude and finally the amazing MiG-29 solo demo performed by the Commander of the Air Force Maj. Gen. Rumen Radev who exhibited the "Fulcrum" in an aggressive acrobatic programme. After a stunning take off with a hard left bank, he made a series of low passes and spectacular manoeuvres such as the "Cobra" and an incredible touch and go followed by a barrel roll. The show was closed with a fighter formation of two MiG-21bis', two MiG-29s, and two Su-25s. once on the ground, the aircraft were parked in front of the public so people could see the pilots.

About 50,000 people attended this air show that was an excellent showcase for the Bulgarian Air Force, a

good way to attract young people to the military world and to receive public support for its renovation programme that required to buy 8-10 new multirole fighters in the near future.

We wish to thank the press office's staff and Ognyan Stefanov for the organization and the support during the event.



A pair of L-39ZAs above and a pair of C-27Js below.







Click on the above to see an excellent video of this MiG-29.
The pilot is the commander of Bulgarian Air Force Major General Rumen Radev.



Pilatus PC-9 trainer

Sukhoi Su-25 "Frogfoot"



First line from left to right : Col. Dimitar Ivanov - Commander of BuAF16th Transport Air Group, Major General Rumen Radev - Commander of Bulgarian Air Force, Brigadier General Anatoliy Krastev - Deputy Commander of BuAF, and behind them are some the air crews participated in the air show.









PIMA AIR & SPACE MUSEUM ARTICLE AND PHOTOGRAPHY BY THE EDITOR

From beneath the Convair B-36J Peacemaker, left to right Avro AEW.2 Shackleton, Boeing EC-135J Stratotanker, and the Boeing EB-47E Stratojet.



The Pima Air & Space Museum is one of the best museums for aviation enthusiast to visit, not only in the USA but on planet Earth.

While this may sound a bit over-stated, the reality is that this is a very correct description of the museum. It is the largest privately funded aviation and aerospace museum in the world and the third largest aviation museum in the U.S., spread out over 80 acres. Established on May 8, 1976, the museum displays more than 300 aircraft consisting in majority of American made ones, as one would expect, but there are a few surprises such as; Avro AEW.2 Shackleton, English Electric Lightning F53, MiG-29A, Panavia IDS Tornado and the Fairey AEW MK. 3 Gannet. Surprisingly there are no F-16 Fighting Falcons or a B-1B on display, which is too bad and unfortunate considering that there are dozens of them just next door at the Boneyard, in various stages. There are four hangers housing many restored aircraft such as the SR-71A Blackbird, the B-24J Liberator (ex Indian Air Force) and a Space Gallery. There is an additional Museum within the grounds the 390th Memorial Museum, an independent military museum displaying a B-17G Flying Fortress, and the Arizona Aviation Hall of Fame. Many of the aircraft are displayed outside giving the visitors a rare opportunity to be up close and personal and the ability to take photographs in the natural and very bright light under the Arizona skies.

I've visited the museum several times over the past decade, and found it always fascinating. While the aircraft on display outdoors have not changed much over the years, interesting to see some of them under new paint, and to see which ones are waiting for a fresh coat of paint in the restoration yard. Speaking of paint there are six aircraft on display used as canvas by contemporary artists, (part of a project conceived in 2010 by gallery owner Eric Firestone, and organized with curator Carlo McCormick) three of them, a Beech C.18S Expeditor 'Naughty Angels' (ex RCAF) Lockheed VC-140B Jetstar 'Spy Tiger' and Lockheed VC-140B Jetstar 'Back to Supersonica' are prominently displayed on the museum grounds along Valencia Road near the museum's entrance. The other three are located in back, they are all ex US Navy C-117Ds: 'Time Flies By', 'Warning Shot' and 'Phoenix in Metal'.

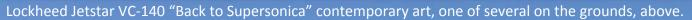
One can spend a lot of time at the Pima Air & Space Museum to see everything properly, it is best to plan for a two day trip and one of that could be a bus tour to the Boneyard as the 309th AMARG is known, to see thousands of aircraft in various stages from storage to parts.

For additional information and for admission pricing please visit their website at http://www.pimaair.org/











Lockheed Jetstar VC-140 "Spy Tiger", above.





Nellis AFB Open House REPORT AND PHOTOGRAPHY BY NORMAN A. GRAF

Aviation Nation came back with a bang! Canceled last year due to funding cuts, this year's Open House at Nellis AFB was eagerly anticipated. The two-day show offered visitors the opportunity to not only watch a world-class air show, but also take in acres of aircraft on static display, and perhaps more importantly, to interact with the many Airmen on base. With the budget sequestration still in effect and Air Combat Command's support for the Tactical Demonstration Teams limited to the F-22 Raptor, it was one of the few air shows in the US where one could experience the raw power of modern combat jets in action, and the only air show where both fifth-generation fighters flew in formation. It also had warbirds and civilian aerobatic acts, providing something of interest to just about every air show enthusiast.

Access to the air show is via bus shuttle from the parking lots of the Las Vegas Motor Speedway. It always pays to get there early, since air show enthusiasts, especially photographers, start lining up much earlier than the scheduled opening time. This year the gates were scheduled to open an hour later than in previous years, although the flying schedule remained the same. This, combined with the much larger crowds, contributed to long delays getting on base Saturday morning. Fortunately this was remedied on Sunday when the buses began running around 0900. Security checks were conducted at the parking lot so once you disembarked at the flightline you were free to proceed directly to stake out a location along the flightline. New this year were the box seating arrangements: for a fee you could arrange reserved seating in one of the many areas set up at show left or even seating with catered dining in a chalet. Then it was off to view the many aircraft and vehicles on static display and talk with the many Airmen in attendance before the flying started.

The air show began at 11:00 with the singing of the national anthem. With impeccable timing a formation flight of the Air Force's two newest fighter jets flew over from behind the crowd just as the singer finished. It was the first public display of the F-35A at Nellis and the first time the Lightning II and F-22 Raptor had flown in formation at an air show. What a sight! Although this single flyover was the extent of the flying demonstration for the F-35A it was clearly the darling of this year's Open House. Spectators ran forward to the fences ooh-ing and aah-ing as Maj. Brad Matherne, 59th Test and Evaluation Squadron F-35 test director, landed and taxied by. Visitors also crowded several deep around the Lightning II on static display, peppering the pilots and ground crew with an endless stream of questions. Taken off-guard by the unannounced flyover, many photographers in the audience made sure not to miss the photo on Sunday morning. Chuck Coleman started off the day's flying in his EXTRA 300 and put on a high-octane demonstration of precision aerobatics that woke up the crowd and prepared them for the non-stop action ahead.





Capt John Cummings, pilot and Msgt Jason Kraemer of the F-22 Demo Team

Las Vegas Army Airfield, the precursor to Nellis AFB, was activated just two weeks after Pearl Harbor Day. Its primary mission was bomber gunnery training. The Legacy Bombers act honored that history, with the B-25J Mitchell "Executive Sweet," a C-45 in the role of an AT-11 Kansan, and an AT-6 Texan all performing as bombing-gunnery trainers. This quickly morphed into a World War II aerial engagement re-enactment as an A6M Zero attacked the bombers, only to be attacked itself by an F6F Hellcat, F4U Corsair and P-51 Mustangs. Afterwards, Craig "Brute" Teft flew a very nice aerobatic demonstration in his CJ-6 Nanchang which then segued nicely into

the Korean War aerial warfare demonstration. This featured jet dogfights between a MiG-15, F-86 Sabres, and a brand new T-33 which was nicely painted in Korean War markings. The ground attack mission was undertaken by a P-51 Mustang, F4U Corsair and F8F Bearcat, all controlled by an AT-6 Texan as FAC. Chris "Zippo" Fahey and Greg "Wired" Colyer finished off with some really nice and tight formation flights in the MiG-15 and T-33, respectively. Greg then put on a solo aerobatic demonstration in "Ace Maker II." Later, the Horsemen put on an amazing aerobatic formation demonstration in their F-86 Sabrejets, although only Steve Hinton and Dan Friedkin performed. Continuing the aerobatic jet theme, Paul Strickland, former Thunderbird and current Patriots pilot, put on a nice demonstration in the Bitcoin L-39. "Sticky" put the Albatros through its paces, including a very dynamic touch-and-go landing at show center.

strations of fighter and attack capabilities. They demonstrate the tactics and techniques that are developed and taught at the USAF Warfare Center, based right here at Nellis AFB. First off was a demonstration of air-to-air combat that started when a pair of F-16 Fighting Falcons from the 64th Aggressor Squadron bounced the airfield. A pair of F-15C Eagle fighters immediately scrambled, taking off in full afterburner. The four aircraft dueled it out in the sky, jinking and weaving through the bright November skies, the attackers desperately attempting to evade their pursuers, all four fighters popping flares as countermeasures against heat-seeking missiles. It was a rare display of the dogfighting capabilities honed to perfection during endless training missions and taught to US and allied pilots during the Red Flag exercises held at Nellis several times each year. (For a review of these exercises, see our coverage of Red Flag 14-1, 14-2 and 14-3.)

Next was a very impressive demonstration of ground attack capabilities carried out by a pair of A-10 Thunderbolt IIs and F-15E Strike Eagles. Preparing to attack the airfield, they too deployed flares during their inbound flights before engaging in simulated bombing runs. The pyrotechnics accompanying their passes were remarkable, the percussive explosions providing incredible simulations of the military ordnance being deployed. Training for such ground attack missions takes place regularly during Green Flag exercises at the National Training Center at Fort Irwin with aircraft staging out of Nellis. A Green Flag exercise was actually in progress during the weekend, so the audience was treated to takeoffs and landings of several B-1B Lancer bombers during Sunday's show. Kudos to the organizers for arranging this air show extra!

After the close air support demonstration, HH-60G helicopters of the 66th Rescue Squadron, accompanied by pararescuemen assigned to the 58th Rescue Squadron, swooped in to demonstrate a combat search and rescue mission. As one Pave Hawk provided cover, the other came in low, slowed to a hover and dropped a line to the ground. A pararescuer fast-roped down, attended to the wounded Airman, then both were winched back aboard the waiting helicopter. It sounds simple enough, but the fluid execution of such a complex and important life-saving mission only results from countless hours of training and practice.





Although the F-35A Lightning II only performed a single flyover in its Nellis air show debut, Capt John Cummings put on an amazing demonstration of the F-22's flight capabilities, flying a combat-ready Raptor from the Nellis-based 53rd Test and Evaluation Group. "Taboo" really wowed the crowd with maneuvers that seemed to defy the laws of physics, and engaged in such high-g turns that he was able to pull vapor out of the high desert atmosphere. Displaying the weapons bay in a "now you see it now you don't" banking pass is always a thrill for the audience, but the tail slide elicits the most gasps of disbelief. After finishing his routine he joined up with Steve Hinton and Dan Friedkin in their F-86 Sabrejets for an all-jet Heritage Flight.

The final act of the show was the Thunderbirds, performing in their last show of the season at their home base. We were privileged to watch them perform at over half a dozen shows this year and their final show was one of their best. The beautiful blue skies and the wonderful backdrop of Sunrise Mountain made for some amazing photographic opportunities. We wish the best to Lt. Col. Greg Moseley, newly-promoted Lt. Col. Caroline Jensen, Maj. Blaine Jones, Maj. Michael Fisher and Maj. Michael Carletti, all of whom will be leaving the team after an extended three year term.

Over 175,000 visitors attended the two-day Open House, a testament to the interest of the public in the mission of the base and the pent-up demand caused by last year's air show cancelation. This caused some issues with transportation on Saturday, but show organizers reacted by starting the buses an hour earlier on Sunday. There were sufficient food booths and bathroom facilities distributed throughout the air show grounds that lines were not an issue, and prices were reasonable. Free water was available from military water trailers. New this year were the premium seating areas and chalets for the general public. Several bleachers were provided at show center as well as a section reserved for handicapped visitors. The viewing area is west of the double 03/21 runways, meaning that the afternoon sun is over your right shoulder. Show right, with the best lighting, is also closest to the hot ramp. Since much of the air-to-air demonstration takes place at the north end of the base it's a good idea to attend both days and sample the action from various vantage points. It's also good practice in case weather or other circumstances cause a change in the flying schedule (such as the B-1 launches and recoveries on Sunday only.) Taxiing takes place quite close to the audience, with aircraft utilizing both near and far runways for takeoffs and landings. A zoom lens is therefore the best choice unless shooting with multiple cameras.

The Nellis AFB Open House was a fantastic way to end the 2014 airshow season! Unfortunately, scheduling conflicts have ruled out a show in 2015. Nevertheless, we look forward to visiting again soon: look for our coverage of Red Flag 15-1 early next year.

We would like to thank the 99th Air Base Wing Public Affairs Office for all of their hard work, in particular Master Sgt. David Miller, Staff Sgt. Siuta Ika and A1C Thomas Spangler whose dedication and persistence got us our photos and intervious.



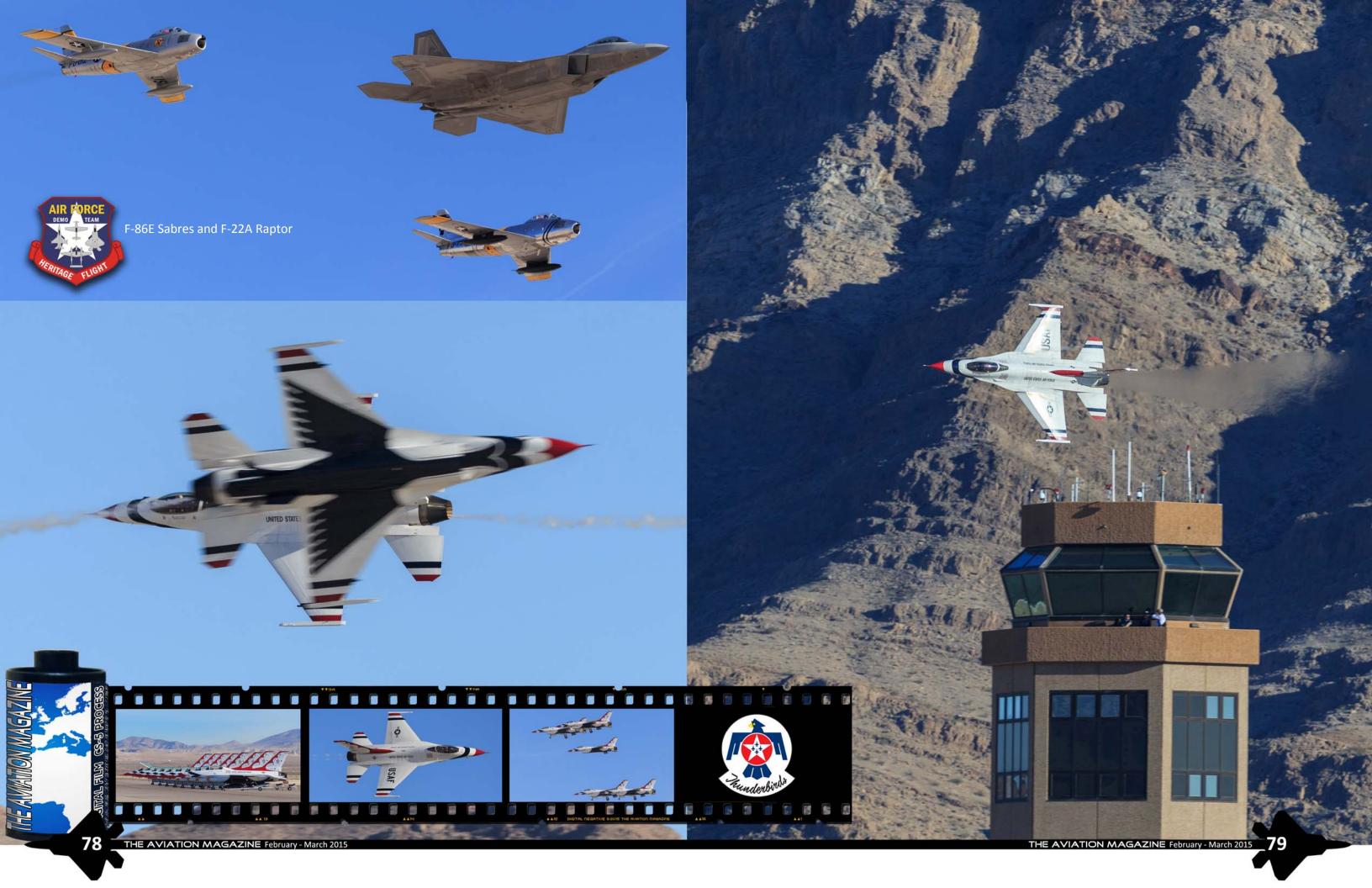
Chris "Zippo" Fahey in the MiG-15 and Greg "Wired" Colyer in the T-33 "Ace Maker II" above respectively.





A-10 in the air-to-ground demo above, and Steve Hinton and Dan Friedkin in their F-86 Sabrejets





THE BEST AIR SHOW OF 2014



Article by the Editor, photography by Norman A. Graf

The Best of 2014 Air Show award was not easy for the year 2014! But, we managed to come up with the best for both civilian and military air shows.

The BEST overall:

- Civilian winner was Wings Over Houston Air Show, held in the first week of November.
- Military air show was MCAS Miramar Air Show, held in the first week of October.

RIAT 2014 in close second, which is actually a hybrid: neither true civilian nor military. Note we only rated air shows, not fly-ins, or exhibitions.

We compiled our list from all the air shows we had attended worldwide and while many were excellent in their own right, they were not the winners. If you have doubts about our decisions, just read our reviews. It is not just about the size of an air show, if only size would matter Oshkosh would qualify, although it is not truly an air show either, but a mixture of fly-in, air show, convention and etc. But we do not attend Oshkosh for several reasons, one is their publication policy! Apart from that RIAT which is the largest one when not counting home-builds, and small civilian Cessnas and alike, had more aircraft than anyone else both flying and on display, and of course there was the bi-annual Farnborough which advertises itself as the largest one, which is again only partially correct as it is not just an air show, but mostly an exposition for manufacturers to display their products for customers with a much smaller display air show for the air show enthusiast.

Honourable mentions go to Meeting at Cazaux, held at the French Air Base 120, near Bordeaux, France, for excellent hospitality and a great variety of top of the line performers and the Malta International Air Show, which for a small air show with limited resources did an over all excellent job.

Congratulations to all the winners!



WINGS OVER HOUSTON



MCAS MIRAMAR AIR SHOW

Article by the Editor FOR AVIATION PHOTOGRAPHY...

We do not want to be accused of bias of any kind, in our recommendation for aviation photography, hence we show comparable gear from several brands in the same price range. For great images apart from having the right equipment, (some work better than others) one needs to have a sense of visualization of what they want the end result to look like. To be a good photographer one must concentrate on what they are doing, know how to use their equipment, and have a steady hand (a tripod or monopod works too depending on the situation).

FULL FRAME SEMI-PRO \$2000-\$3500

Nikon D750

is one of the latest full frame cameras offered by Nikon.

24.3MP full-frame CMOS sensor combined with the EXPEED 4 image processor offering a continuous shooting up to 6.5fps, that is a faster frame rate than any non-professional fullframe Nikon DSLR since the D700. A first for the Nikon fullframe to feature a tilting LCD screen; a 3.2" 1,229k dot LCD. Its 91k-pixel RGB metering sensor works in conjunction with an improved version of the 51 point AF system found in the D810 and D4s. Perfect for accurately tracking moving subjects, such as aircraft. Built-in Wi-Fi is a much-welcomed feature in the D750. It is also a powerful tool for videography



with capture rates at up to 60fps, in 1080p, and features zebra stripes and auto ISO in manual mode. This camera is real winner, even if one considers the limited buffer space it offers. While it is not exactly inexpensive at \$2549.95 Cdn or \$2299.95 US, (body only) it is close to \$1000 less than the 36MP D810!



Canon

Mark III is the latest and much improved version of the full frame EOS 5D series offered by Canon.

22.3 MP CMOS full-frame sensor, 6 fps, 1080p video at 24, 25 or 30 fps and 720p at 60 or 50 fps. It has 63-zone metering sensor, dual slots for CF and SD cards. The new sensor, coupled with Canon's latest DIGIC 5+ processor, offers a standard ISO range of 100 - 25,600 that's expandable to 50 - 102,800. The shutter is rated to 150,000 cycles and has been refined for quieter operation. Viewfinder coverage is a full 100%, and the 1040k dot, 3:2 aspect ratio 3.2" LCD

body. The list price is \$3499.99 Cdn or \$3099.00 US from your Canon dealers nearest you.

LONG REACH ZOOM LENSES UNDER \$3000

AF-S NIKKOR 80-400MM F/4.5-5.6G ED VR



The ultimate relatively compact medium to super-telephoto zoom lens for any Nikon DSLR from FX (full frame) to DX (crop sensor). The AF-S NIKKOR 80-400mm f/4.5-5.6G ED VR has the broadest focal length range in Nikon's super-telephoto zoom line-up, it reduces the number of lenses you need to carry into the field; and expands your handheld shooting capabilities, thanks to Nikon's Vibration Reduction (VR) technology. Create spectacular photos and HD videos in nearly any light, from nearly any distance. When used with a DX sized sensor it has the field of view of 120-

600mm, which makes it an ideal lens for aviation photography. While it is a compact lens when compared to the Nikkor 200-400mm F4, it is a heavy one, although not as heavy as the aforementioned lens. This lens is sold at \$2949.95 Cdn or \$2699.95 US, at your nearest Nikon dealer.

CANON EF 100-400MM F/4.5-5.6L II USM



The new 100-400mm F4.5-5.6 II USM supertelephoto zoom lens features Canon L-series weather resistance and rugged magnesium housing. Fully compatible with all EOS cameras, this new lens' features were completely redesigned and now uses a rotation-type zoom ring vs the older push-pull design, fast and accurate autofocusing in various shooting situations. When used with a crop sensored camera such as the EOS 70D the field of view yields 160-640mm, an excellent reach for aviation photography. List is \$2,199.00 US

While there are many other manufacturers who make quality DSLR cameras, such as Sony and Pentax, the ones mentioned here represent the latest state-of-the-art with features trickling down from their professional cameras. The other brands also lack in the wide variety of lenses, and more importantly are not supported by independent lens manufacturers such as Tamron and Sigma with the exception of Sony, as some lenses are available in Sony mount from the aforementioned.

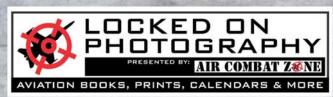
In our next issue, we will be listing long reach zoom lenses from both Tamron and Sigma, and will continue with a series of more affordable consumer DSLRs and Mirrorless cameras from additional brands.

The bottom line is to get decent images you do not have to pay an arm and a leg, it just depends on the skill of the photographer and on the opportunity.

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WARBIRDS AIRZAIR

IMAGES BY BRIAN R. VEPREK



The 'Impatient Virgin' is the only airworthy P-51B in the United States









I AM FULL THROTTLE

I AM Patrice Olivier Photographer

http://patriceolivier.photodeck.com/





AIRPORT SPOTTING





Atlas Air Inc. Boeing 747 LCF Dreamlifter, an extensively modified Boeing 747-400



Atlas Air Inc. Boeing 747-400 Freighter



China Airlines Cargo Boeing 747-400 Freighter





Greyhound C-2A, VRC-30 Providers at NAS North Island, San Diego, CA.

F-35B Lightning II, VMFA-121 Green Knights at MCAS Yuma, AZ.





Grumman E-2 Hawkeye, at NAS North Island, San Diego, CA.



F/A-18B Marine Fighter Attack Training Squadron 101 (VMFAT-101) at MCAS Miramar, CA.

Beechcraft T-6B Texan II TAW-4 at NAS North Island, San Diego, CA.



ny friend dallas "american flag rider" withgenteld

Article by the Editor, photography by Arnette K. Sherman



Dallas Wittgenfeld (LRP 41) aka "American Flag Rider" parachutes into the Parker Booth Memorial Golf Tournament held at Pelican Pay Golf Course, Daytona Beach Florida, on December 6, 2014.

I've had the pleasure to meet Dallas, "LRP41" back in 2009 at air show. He and I hit it off right away. To me, LRP41 is a an American Hero, who has received a Purple Heart for his service in Vietnam.

During the Vietnam Conflict, Dallas volunteered while several of his friends were seeking ways and means not to, including dodging the draft and moving to Canada. He wanted high adventure, more than just Decatur, Indiana (his hometown) could possibly provide. From September 10, 1968 to July 1, 1972 he served in the Indiana 151st Infantry Airborne Rangers in Vietnam, then the 75th Infantry Airborne Rangers, and finally with the 46th Special Forces where he trained the CIA-funded Royal Thailand Army Volunteer Force mercenaries "Patrolling Aerial Reconnaissance Unit" (P.A.R.U.) As their Green Beret Colonel Commander's "Special Liaison N.C.O." he certainly got much more excitement than he'd anticipated. Dallas was wounded in combat twice before he was 21 years old.

For the past four decades has performed as a professional skydiver in 20 states with over a thousand jumps, 350 balloon flights. Let's fast forward to today: and he still performs as a parachutist his latest one was captured by Arnette K. Sherman, with her camera, and shown here.

For availability and booking arrangements contact Dallas via email: PurpleHeartParachutist@gmail.com or by phone: (386)-479-4843.



THE AVIATION MAGAZINE

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

