

THE AVIATION MAGAZINE

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October - November 2014
Volume 5, Issue 6



- ✈ Marrakech Air Show, Morocco
- ✈ Flying above the USAF Thunderbirds
- ✈ Green Shield 2014, Base Aérienne 133, France
- ✈ Hawgsmoke, Davis-Monthan AFB, Arizona
- ✈ Anatolian Eagle, Konya AB, Turkey
- ✈ RIMPAC 2014
- ✈ And so much more...



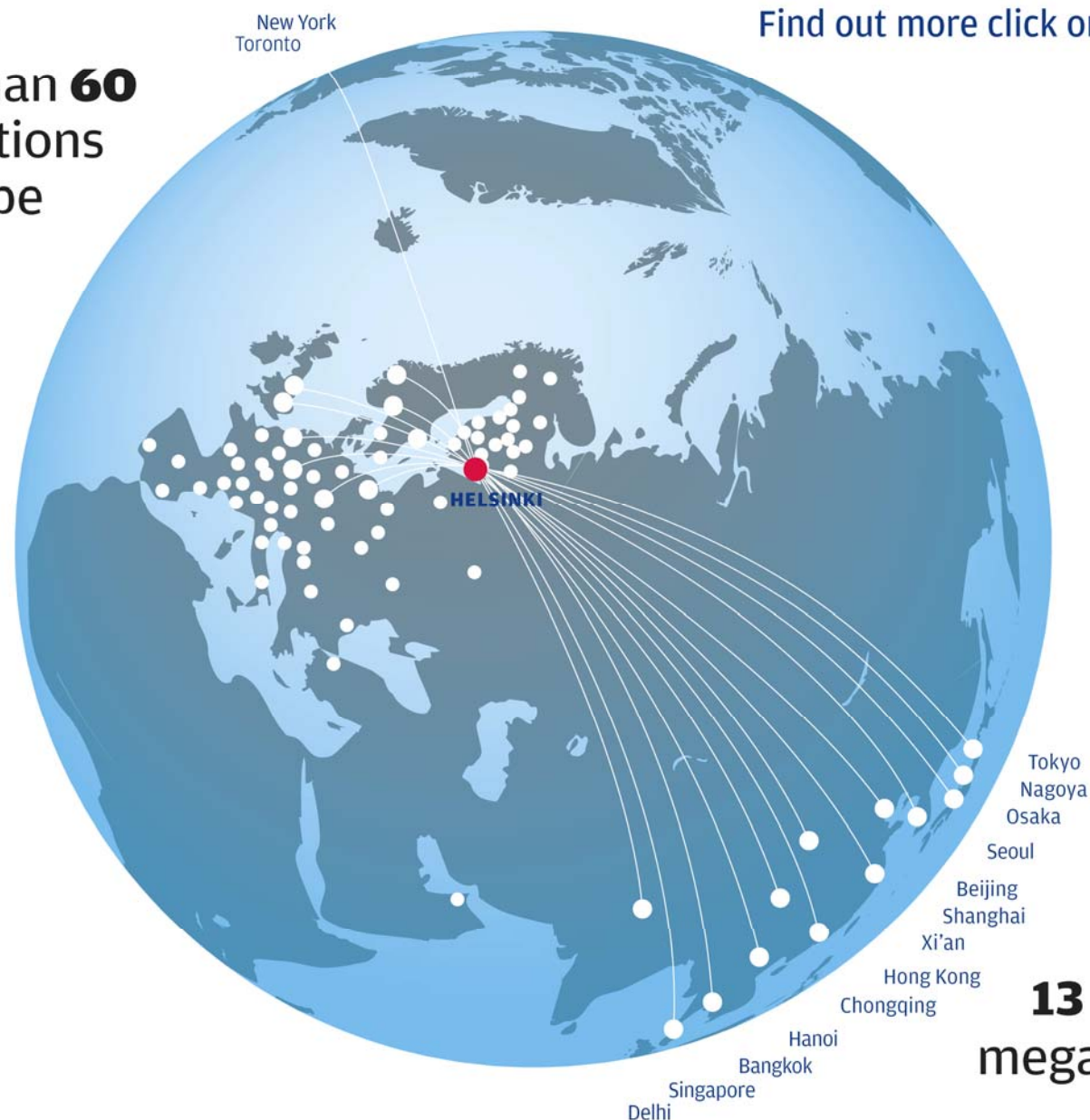
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October-November 2014 Volume 5, Issue 6

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by www.TheAviationMagazine.com

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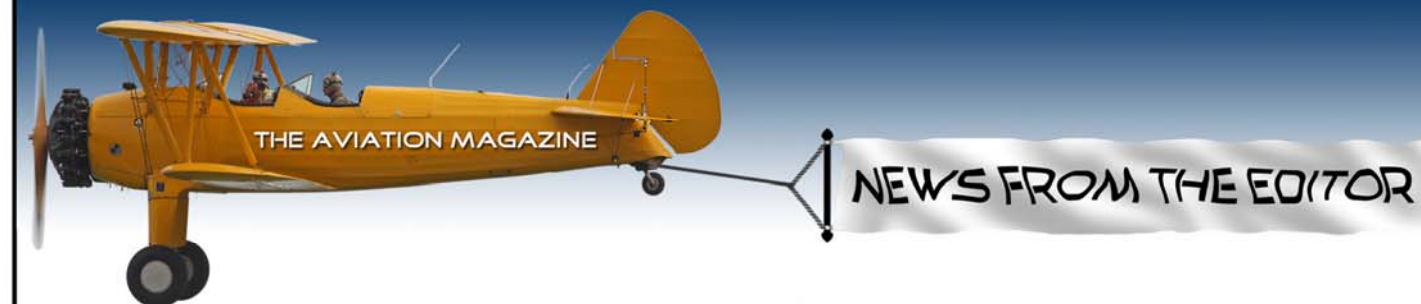
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"Change is good!" So goes the saying, and with this issue we have! We changed the name of the magazine to **THE AVIATION MAGAZINE**, to reflect more what we are all about, not just about air shows but a much wider field of aviation interests.

We also changed location and management, from New York to the Greater Toronto Region, namely Mississauga. Additionally, we consolidated our staff of contributing photographers, with more changes coming later this year or early next year. The website was updated dated to reflect not just the name change to **THE AVIATION MAGAZINE**, but to reorganize it with a sleeker interface.

In this current issue we have a great variety of reports and images from our staff covering not only air shows and air base visits but several military exercises such as the largest one in the world: the 24th Biennial RIMPAC 2014. Twenty two nations participated with 49 ships, including several aircraft carriers, 6 submarines and more than 200 aircraft.

For those interested in civilian airliners we have a selection of spotting images from Malta, that features rarely seen liveries in North America. We also split our coverage of the Royal International Air Tattoo, aka RIAT, into two parts to give a much better coverage and from different contributors to our magazine.

In our next issue we will have RIAT part 2, as well as an exclusive ride with the Breitling Super Constellation. Visit our new site www.TheAviationMagazine.com to sign up for free notification when the next issue is available. We will have additional surprises as well! So stay connected with us!



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MARRAKECH 2014

REPORT AND PHOTOGRAPHY BY PETER THIVESSEN AND WOLFGANG JARISCH

The 4th Marrakech International Aerospace Exhibition and Air Show were held from April 23rd to 26th under the high patronage of His Majesty King Mohammed VI on the military section of the Marrakech Menara airport. The show was organized by the IEC Group under support of the FRA (Forces Royales Air = Royal Air Force Morocco) and other official institutions of Morocco and the Royal Air Maroc.

After only three previous events, the Marrakech Air Show became the top contender meeting place for the civil and military aerospace industry on the African continent. The leading Aircraft Equipment Manufacturers alongside a significant number of Business Aviation Services, Commercial Aviation and the Defense Industry participated in the 4th biennial Marrakesh Air Show to establish and develop their business relationships on the growing African market.

The show opened on April 23rd, by the Prime Minister Abdelilah Benkirane, in the presence of high-ranking government and military delegations alongside the CEO'S and employees of the exhibitors and visitors.

The opening ceremony was followed by a parade of a military brass band and fly past of two SA 330F Pumas, each with one flag (the Moroccan flag and the Air Show Logo) under the fuselage.

Next came a short flying display with various formations of aircraft from the Royal Air Force of Morocco with only one fly-by. The most interesting formation was when a KC-130H tanker flew by with two Northrop F-5s, docked on the refueling system (this is rarely performed at air shows), and two Mirage F-1Ms and two F-16s beneath. A fire fighting demo was performed by two Canadair CL-415 that used water colored with dye to enhance the visibility. The helicopter demos consisted of a single Agusta Bell 205, and a combined attack demo with four AB-206Bs and four SA. 342L Gazelles. The Moroccan "Marche Verte" and the Spanish "Patrouille Aguila" national teams completed the flying program.

The real show of course was not performed in the air, but it was on the ground: conducting business. Embraer, one of the world's leading executive jet manufacturers, brought a complete fleet to Marrakech, from the "Phenom 300", "Legacy 500" to the new executive flagship "Lieneage 1000".

Dassault presented their large cabin and long range "Falcon 7X", which is a very successful series. About 200 of this type entered service in the past seven years, and 70 of them in Africa.

The French manufacturer LH Aviation showed their first completely in Morocco assembled aircraft, the "LH-10M Ellipse". This twin seater light aircraft can be used in a wide range of missions. In general the African continent is a market for small aircraft with multi-role use by Police, Military or other institutions.

For the potential military customers Alenia Aeronautica brought their light gunship the MC-27J with side firing ATK gun installed at the exhibition. This is a very fast Roll On/Roll Off weapon system. ATK stated that "the MC-27J is not just a gunship, it is a battlefield tested platform equipped with proven mission system".

Agusta Westland brought their new AW 139M which is in service with the Italian Navy to Marrakech. Agusta Westland has 200 of this type of helicopter on order for various African governments and commercial customers. Bechcraft promoted their upgraded version of the T-6, the AT-6 which has the same mission system as the F-16. This aircraft attracted many visitors. The Chinese manufacture CATIC (China National Aero-Technology Import & Export Corporation) had a large stand in the exhibition to promote their range of products. The focus was on the 1:10 scale model of their multi-role UAV "Wing Loong I" by many military delegations. The UAV can be used for different missions however, CATIC didn't want to release any further information to the press. The European defense manufacturer MBDA showed models of the proven MICA missiles which can be carried by the Mirage F1, Rafale or Mirage 2000s, also a version of the Exocet MM Block 3 on their stand.

The static display was dominated by all the aircraft types in use by the Royal Air Force of Morocco, the Gendarmerie Royal, and the Moroccan Navy. The only foreign military visitor in the static display area was by the USAF with one C-130J and one KC-135R.

The Magazine would like to express our thanks and sincere appreciation to the Media and Communications organization of the IEC group, and to Amal for the outstanding hospitality and assistance.





(4) Mirage F1Ms ©2014 Wolfgang Jarisch

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Air-to-air refuelling demo with a KC-130 and (2) F-5E Tiger II, (2) Mirage F1M and (2)F-16, above. Canadair CL-415 water bomber below.



MICA missiles ©2014 Wolfgang Jarisch



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And the band marches on...

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The Moroccan "Marche Verte"
The Spanish "Patrulle Aguila"

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Marrakech
Air show



Agusta Bell 206B in the front with an SA 342L
Gazelle in background ©2014 Wolfgang Jarisch

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Thunder Over Solano

Travis AFB CA

REPORT AND PHOTOGRAPHY BY NORMAN A GRAF

Travis AFB invited the public to its first Air Expo and Open House since 2011 on the weekend of May 3-4. The base is the largest in Air Mobility Command, with the active duty 60th Air Mobility Wing and the Air Force Reserve 349th Air Mobility Wing providing airlift, air refuelling and aeromedical evacuation anywhere in the world in a matter of hours.

"Thunder Over Solano" allowed hundreds of thousands of people to visit the base, see its assets up close, interact with the many dedicated Airmen, and watch an air show with a broad spectrum of aerial acts and performers. The two-day event featured flybys of the resident C-17, KC-10 and C-5s, a brief tactical demonstration by the F-16, the Heritage Flight composed of the F-16 with a P-51, the US Army Golden Knights parachute demonstration team, a number of civilian aerobatic performers, and finally the USAF Thunderbirds. Sadly, Sunday's show was marred by the tragic loss of one of the air show community's most admired performers.

The expansive ramp was filled with a wide selection of aircraft on static display. Local Travis statics, the C-17 Globemaster III, KC-10 Extender and C-5B Galaxy, were located at both ends of the tarmac, with a B-52 Stratofortress located right at show center. A nice collection of Boeing 707 derivatives, namely the KC-135R Stratotanker, E-3 Sentry AWACS and RC-135 Rivet Joint, were lined up together on the south end of the runway next to the Travis aircraft. All of the large aircraft except the Stratofortress were open for viewing, drawing long lines of visitors eager to explore the cockpits, marvel at the expansive cargo holds, and climb down into the tail of the tankers to peer through the windows at the rear of the aircraft and get a "boomer's" view of the world. The Heritage Area featured quite a few warbirds, the P-51 Mustang "Jelly Belly" and the B-25 Mitchell "Tondelayo" among them. Fighter Alley contained a complete lineup of current USAF

fighters, namely the F-15 Eagle, F-15E Strike Eagle, F-16 Fighting Falcon and F-22 Raptor, with the A-10 Thunderbolt II thrown in for good measure. Filling in the remainder of the apron was a nice collection of USAF trainer and surveillance aircraft, including a U-2 Dragon Lady from nearby Beale AFB.

The US Army's parachute demonstration team, the Golden Knights, started off the airshow by jumping in the US flag as the national anthem played, then put on their full demonstration. A parade of "heavies" left no doubt about what was up next, as the resident C-17, KC-10, C-5B and a C-5M Super Galaxy from Dover AFB taxied by in close formation. They quickly took to the skies, taking off steeply and banking sharply to return and pass in front of the crowds. The superior performance of the Super Galaxy compared to the C-5B was remarkable, taking off in a much shorter distance and climbing more steeply. The distinctive whine of the Galaxy's engines was noticeably absent from the modernized C-5M. The C-17 and Super Galaxy soon landed; the KC-10 and Galaxy departed for an aerial refueling training mission which would take them north to Oregon before returning for a fly-by and landing later in the afternoon. Maj Mark "Juice" Whisler fired up the crowd when he took off using afterburner in the F-16. Although he did not perform the full tactical demonstration that was the norm in years past, he did make several high speed passes and generated enough jet noise to excite the many spectators. He was soon joined by Charlie "Tuna" Hainline, flying the P-51D Mustang "Bum Steer," for the Heritage Flight.

Spencer Suderman and Bill Cornick put on individual aerobatic performances in their Pitts biplanes, then later competed in an Acro-race where they raced to complete the same set of routines side by side in the sky. As Rex Pemberton descended in his wing suit, his wife Melissa Pemberton flew circles around

him in her Edge 540. Melissa then performed a very impressive aerobatic show, including her double-ribbon cut. In this maneuver she first flies between two ribbons stretched between the same set of poles, returns to fly under and cut the lower ribbon with the tail of her aircraft and finally flies over and cuts the upper ribbon in an inverted attitude. Steve Stavrakakis put on a graceful display in his Romanian-built IAR-823 and Kent Pietsch amused the spectators with his usual routines in his bright yellow Interstate Cadet. Greg "Wired" Colyer flew his T-33 "Ace Maker" through a series of powerful maneuvers, demonstrating why the Shooting Star was once used by the Thunderbirds.

Early in the day Eddie Andreini performed an exceptional aerobatic routine in his recently acquired and restored P-51D Mustang "Primo Branco." The longtime air show performer was well-known and revered in the air show community. The International Council of Air Shows (ICAS) presented him with its Sword of Excellence Award, the highest honor an airshow pilot can receive, in 2004. Last year Eddie was inducted into the ICAS Hall of Fame. Tragedy struck later in the afternoon during his Stearman routine. While attempting his signature inverted ribbon cut, the biplane impacted the runway. He did not survive the crash. Officials quickly secured the area and cancelled the remainder of the air show; Open House visitors were requested to leave the base. We left shocked and deeply saddened.

We would like to express our thanks and sincere appreciation to the 60th Air Mobility Wing Public Affairs Office in particular 1st Lt Jessica Clark, for their outstanding hospitality and assistance during the Air Expo and look forward to returning under better circumstances.





Eddie Andreini in his Stearman, before his fatal accident above, the C-5M Super Galaxy landing in the middle and a B-52H, below.



Maj Mark "Juice" Whisler in the F-16C



Kent Pietsch, Interstate Cadet



Melissa Pemberton in her Edge 540





Heritage Flight P-51 and the F-16C



C-5M Super Galaxy



FLYING ABOVE THE USAF THUNDERBIRDS

REPORT AND PHOTOGRAPHY BY NORMAN A GRAF





May 1st, 2014

Aerial refueling is an integral part of US airpower, and the KC-10 Extender is the largest and most capable tanker in the Air Force's inventory. The 59 Extenders in the USAF are based at Joint Base McGuire-Dix-Lakehurst, NJ and Travis Air Force Base, CA. As part of the outreach activities prior to this year's "Thunder Over Solano" Open House and Air Show, media flights were arranged for members of the press. We were privileged to be invited to ride along on a refueling training mission and observe the members of Team Travis in action. In addition to the media representatives, a number of airmen were also participating. These "incentive flights" are offered as a reward to individuals for exemplary performance. We were in good company.

Our day started with a briefing at 08:30 by Lt Col Thad Middleton, Commander of the 9th Air Refueling Squadron. Two KC-10s would be taking off in quick succession, one from the 9th ARS, the other from the 6th ARS following a minute later. We were to proceed to cleared airspace in southern Nevada. There we would rendezvous with three F-35s and refuel them. We would then be meeting up with the Thunderbirds who were to formate on the lead tanker. Thunderbird #7 would be joining us to take some pictures, after which they would be refueling. Flying from Nellis AFB, the Thunderbirds would spend roughly an hour engaged in orientation flights around Travis AFB, so it was important that they have sufficient fuel for their mission. "Yes this is a media flight. It is an incentive flight. But what we're doing today is operational. We do these things operationally: whether it's formation anchor AR, receiver AR, tanker AR. All these things you get to see today are things that our guys do and train to so we can actually execute it in the AOR or on an operational mission," explained Lt Col Middleton. He then turned the safety portion of the briefing over to "the sharpest boom operator I have in the 9th Air Refueling Squadron, Sergeant Durham. All these things he's going to talk about are things I do not expect to see today. But he's going to have you prepped, briefed and ready to go."

At 09:00 we proceeded to the tarmac and made our way up to KC-10A, 85-0033. We were once again briefed on the safety procedures and allowed to tour the plane before takeoff. The aircraft was arranged in the "Delta" configuration, meaning it had extra passenger seats installed. In addition to its refueling capabilities, the Extender can also transport up to 75 people and nearly 170,000 pounds of cargo a distance of about 4,400 miles unrefueled. "We can load cargo, carry passengers and take jets. We can move an entire squadron at once: fighter aircraft with their personnel, their cargo, their maintenance equipment. That's what makes us unique compared to the KC-135 or the C-17 and C-5 that can only take the cargo. We're a one-stop shop. That's what makes us so great," explained SSgt Mike Durham. Behind the passenger section was the expansive cargo hold, which even in this configuration could still hold 145,000 pounds of equipment. The only requirement on the cargo is it must conform to the contour of the fuselage. "If it fits, it sits."

By then it was time to get ready for takeoff. The pilot-in-command was Captain Ben Middlebrooks of the 9th ARS, and the co-pilot, or right seat, was Captain Colin Eames of the 6th ARS. Because of the complexity involved in loading cargo and transferring fuel between the many fuel tanks in both the fuselage and wings, the KC-10 crew includes a flight engineer, a job performed by TSgt Brian Fowler on this flight. I joined the trio in the cockpit, taking the seat normally reserved for the boomer. We taxied out on to the runway at 10:05. After rotating, we climbed steeply and banked left, providing a nice view of the base and the Travis Heritage Center's Museum of Military Aviation History. We levelled off at 24,000 feet and started our leg to Lake Tahoe, after which we proceeded southeast to our refueling anchor, AR625H, located just east of Death Valley. Once in the pattern pairs of media and airmen were allowed to proceed to the Air Refueling Operator Station, or ARO, located at the rear of the aircraft. Unlike the cramped quarters of the KC-135, which requires the boomer to lie on his belly, and observers to similarly recline and contort themselves to get a view out the small window, the ARO of the KC-10 is quite spacious. The boomer sits in a comfortably padded chair facing backwards. On either side is a similar chair for an instructor or observer. There is a large, flat window facing aft, providing a wide field of view not only of the refueling boom but also broad



On either side of his seat is a joystick, similar to a fighter aircraft stick. The boomer actually flies the boom: left, right, up, and down with the right hand joystick, while the left hand extends and retracts the boom. "Since I'm flying backwards I say left when I mean right and right when I mean left," explained Sergeant Durham.

Once in the anchor, we began to fly our pattern. Since several aircraft were scheduled for our tanker, we were going to employ the "fighter turn on." Right on time, a small dot in the distance grew and approached our plane. It wasn't long before it became clear that this was the first of the F-35s we were to refuel. Excitement grew as the stealthy fighter approached, maneuvering into position even as we were in a banking turn at 300 knots. Sergeant Durham smoothly extended the boom to the open refueling receptacle on the Lightning II and docked it. 8,000 pounds of fuel were soon transferred. As the fighter undocked, Sergeant Durham turned to me and said "that's the first time I've refueled the F-35." It couldn't have been done any better, proving that "a receiver is a receiver." The level of professionalism was quite impressive, one only achieved by continuous training. Told that there were photographers on board, the Lightning II pilot hung around for a while, approaching closely for a few more photos before departing. It was now time to return to the cabin and allow others to enjoy the experience of seeing the newest stealth fighter in the USAF inventory being refueled.

Soon enough we saw the Thunderbirds in the distance, their white fuselages standing out over the stark desert landscape. The Diamond approached in formation, with the solos quickly joining them. The Delta formation soon filled the field of view. On their left (our right), Thunderbird #7 closed in. Staff Sergeant Larry Reid, Jr., Thunderbirds photographer, was in the back seat photographing the formation flight. MSgt Ernest Valles, a Reserve boomer with the 70th ARS, raised the boom to give us an unobstructed view of the seven red, white and blue F-16s. Just then it was "Smoke on." In perfect unison, five contrails started to recede into the distance. "Smoke off" and #4 and #7 were nowhere to be seen: they were so tucked up into the formation that they were completely hidden by the lead Viper. Still in formation, we began our north leg. In the distance were the snow-capped White Mountains and Sierra Nevadas, separated by the Owens Valley. What a sight! After the photo shoot, the Thunderbird formation gracefully dispersed. They split up between "Gucci 09" and "Extender 06" to refuel. Each Viper took on roughly 6,000 pounds of fuel, sliding in from both right and left as we cruised at 310 knots. After refueling, the boom was stowed and the Thunderbirds once again formed up on our KC-10 to give us a private show and engage in some random AR as we dragged them back to Travis. Lt Col Middleton mimicked the captain's voices in the commercial airliners heading towards Bay Area airports: "Ladies and gentlemen, off your right hand side are 2 KC-10s refueling F-16s. Oh! Ladies and Gentlemen it's the Thunderbirds! No extra cost for this special show today." We began our descent and beat feet back to base. "We have to land before the Thunderbirds. We will descend into Travis in a two-ship arrival. That's an operational necessity to expedite the arrival of two aircraft. We will have a half mile spacing with 500 feet stacked up when coming over. We'll do an overhead, break up, come back around and land on two different runways. We need to get off the runway because the Thunderbirds will be screaming in and start doing their practice." After landing and exiting the aircraft Colonel Middleton spoke with each of the incentive flight airmen, presenting them with a squadron challenge coin and some words of appreciation. We thanked our crew and headed towards the sidelines: the Thunderbirds were on approach.

We would like to express our thanks and sincere appreciation to the 60th Air Mobility Wing Public Affairs Office and Lt Col Thad Middleton, Commander of the 9th Air Refueling Squadron, for their outstanding hospitality and assistance in arranging this media flight. Thanks also to the crew of flight "Gucci 09": Captain Ben Middlebrooks (9ARS), Captain Colin Eames (6ARS), TSgt Brian Fowler (9ARS), SSgt Mike Durham (9ARS) and MSgt Ernest Valles (70ARS).





RSAF F-15C

We're reporting from the "Green Shield 2014" exercise held at the Nancy-Ochey Base Aérienne (BA 133). BA 133 hosted in 2014 this recurring exercise from March 29th to April 17th. The Nancy-Ochey Air Base is located in the northeast part of France, 20 km southwest of Nancy (which is on the UNESCO world heritage list), near to the small village of Ochey.

For the fourth edition of the "Green Shield" the preparation began in the second half of last year, when a Saudi delegation visited the CDAOA (Commandement de la Défense Aérienne et des Opérations Aériennes = Air Defense and Operations Command) in Paris.

The last time the RSAF (Royal Saudi Air Force or Al Quwwat al Jawwiya as Sa'udiya) participated with their French counterparts was in 2009 at BA102 Dijon-Longvic. This was the third deployment for the RSAF to Europe for this exercise. For this year's exercise the Saudis brought (6) F-15 Eagles (4xC / 2xD) from the 2sqn from Tabuk, King Faisal Airbase, to France, (4) of them were former US Air Force aircraft based in Europe.

The French contingent of the exercise was made up of (4) Mirage 2000D from the host base 133, (6) Mirage 20005-F from Base Aérienne 116 Luxeil, (4) Rafale from Base Aérienne 113 St. Dizier, (2) Alpha Jets, (1) E-3F and (2) Eurocopter EC 725R2 "Caracal" were also involved in the exercise.

The scenario for this edition of Green Shield was that the Saudi F-15s would intercept the French fighters. The exercise was spread over a two week period, keeping both parties very busy with a minimum of two sorties per day. In addition to the daily scheduled exercise, the French Air Force continued with their daily routine with their Mirages 2000D, based at BA133. SIRPA headquartered in Paris, organized a media day for Monday April 14th. Initially the weather was overcast but soon it cleared up and the photographers had perfect light conditions. For the afternoon a Combat Search and Rescue (CSAR) was scheduled with the EC 725R2 helicopters. After all the fighters returned to base in the afternoon, one of the Caracal helicopters gave a brief CSAR demonstration. When this ended it was a signal for all the media and spotters to leave the BA133. Over all it was an excellent day.

The Magazine would like to thank the Media and Communications Officer Capitaine Laetitia LaGrande and her team from BA 133 Nancy-Ochey and the French press center SIRPA in Paris for their generous cooperation and hospitality.



French Mirage 2000D

©2014 Peter Thivessen



©2014 Wolfgang Jarisch



- French Mirage 2000 F5, above
- Eurocopter EC 725R2 "Caracal" , top left
- French Rafale B, to left bottom
- RSAF F-15C, right bottom

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RSF F-15C, top and bottom



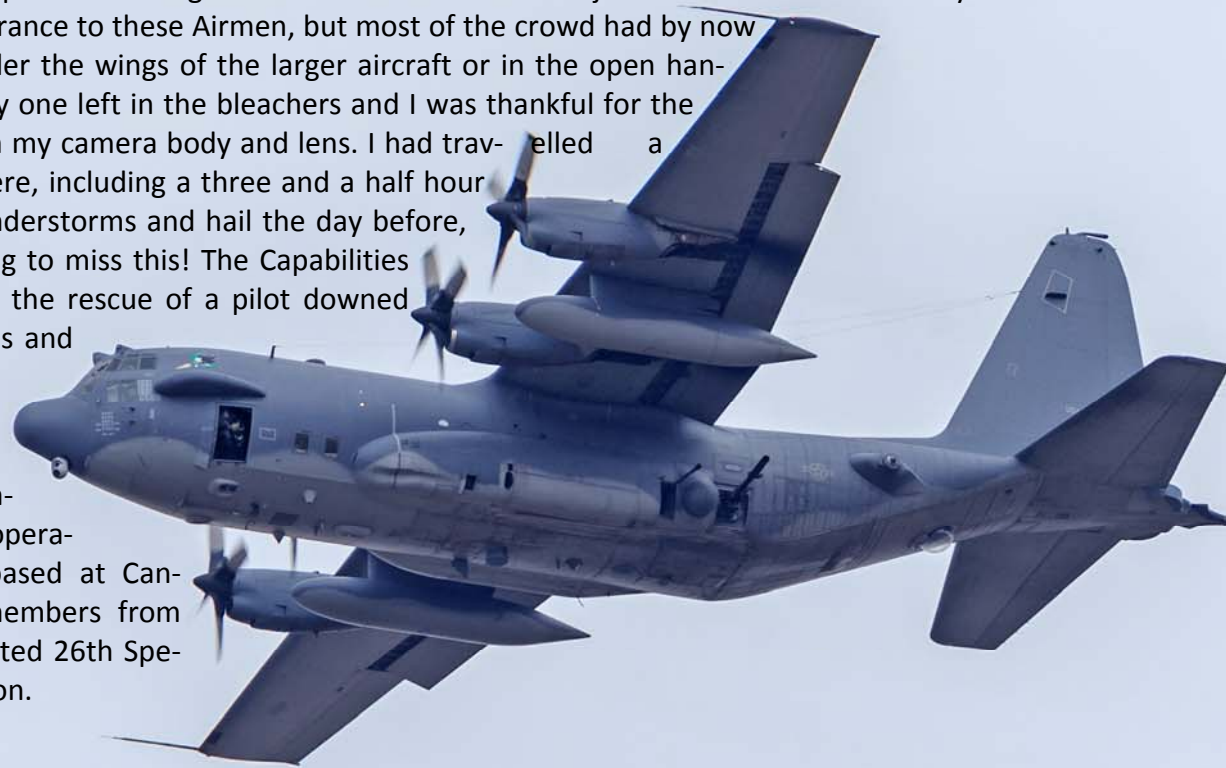


Cannon AFB held its 2014 Open House and Air Show on Memorial Day weekend, May 24-25. Headlining the show were the USAF Thunderbirds and the USAF Academy's Wings of Blue Parachute Team, but what brought us to "Air Commandos on the High Plains" was the opportunity to see the many Special Operations aircraft both in the air and on static display.

The large weather system which plagued the US over the Memorial Day weekend did not spare the high plains of eastern New Mexico. In fact, the opening of the airshow on Saturday morning was postponed by

two hours to allow a storm system to clear. Sunday dawned clear and bright and the gates opened as scheduled at 0800. Parking was as close as you could get, right on the tarmac. Security was conducted expeditiously, leaving plenty of time to visit some of the many informational booths set up on the apron. There was plenty of room along the very long flightline to set up folding chairs, and several free bleachers provided some elevated vantage points. The static ramp contained no less than four C-130 USAF Special Operations variants as well as a C-17 Globemaster III and KC-135R Stratotanker from Altus AFB. Joining the two AC-130 aircraft was the venerable AC-47, the first of the "Spooky" gunships. It was strange not to see the Thunderbirds on the ramp. The overnight weather had been forecast to be severe enough that all six of the F-16s had been towed into a hangar for safekeeping. Unfortunately the skies soon clouded over, a harbinger of worse weather to come. The USAF Academy's "Wings of Blue" parachute demonstration team took off in an MC-130J but were forced to abort their jump due to high winds. Bill Braack drew the crowd in close as he lit the afterburner on the Smoke-N-Thunder jet car and illuminated his clouds of smoke with tremendous flames. By now it was the only bright point left on base. But his high-speed "flight" down the runway was interrupted when the winds shifted to a crosswind.

The 27th Special Operations Wing started to launch its aircraft just before noon in a steady rain. Inclement weather is no hindrance to these Airmen, but most of the crowd had by now sought shelter under the wings of the larger aircraft or in the open hangars. I was the only one left in the bleachers and I was thankful for the weather sealing on my camera body and lens. I had travelled a long way to be there, including a three and a half hour drive through thunderstorms and hail the day before, and I was not going to miss this! The Capabilities Exercise simulated the rescue of a pilot downed behind enemy lines and being threatened by ground troops. It involved aerial assets from a number of the special operations squadrons based at Cannon as well as members from the recently activated 26th Special Tactics Squadron.



An MC-130J Combat Talon II soon appeared, trailing its refueling drogues. A pair of CV-22 Ospreys, probes extended, followed close behind simulating an aerial refueling mission. By now enemy forces had taken notice of the downed pilot and began closing in. Two AC-130 gunships which had been circling above the clouds now descended through the low ceiling and began circling the pilot's position. Their angle of bank and constant radius of turn meant that their guns could be constantly held on target. These attack aircraft are in constant demand to protect troops on the ground in Afghanistan, so seeing them at an airshow, even on static display, is very rare. Seeing them perform a close air support demonstration is even rarer. Having both the workhorse AC-130H Spectre and the testbed for its replacement, the AC-130W Stinger II, performing together was unique to this airshow. With the enemy ground threat eliminated, Airmen riding dune buggies swiftly moved in to secure the pilot, covering him closely to make sure it was not a trap using a decoy. The two circling Ospreys now swooped in to take the troops on board and departed the area.

By now the weather had deteriorated to such an extent that visitors sheltering in and under the larger aircraft were instructed to move to the hangars. Lightning strikes were recorded within five miles and safety was paramount. The U. S. Air Force Academy Band, Blue Steel, performed in one of the hangars. They provided welcome entertainment to the crowds waiting for the storm to pass.

Most of the people had come to see the Thunderbirds, so it was fortunate that the storm had passed by the time they were scheduled to perform, leaving behind blue skies and puffy white clouds. The Thunderbirds did not disappoint, putting on their usual high-energy show. The moisture in the air provided lots of vapor during their high-g turns. After the show, the members of the team came forward to answer questions, sign autographs and pose for photographs with their many fans. Bill Braack was finally able to return for his high-speed run down the runway, providing entertainment to those who decided to stay behind and not make a run for their cars.

Despite the weather, approximately 25,000 people, mostly from the surrounding area, turned out for the airshow. The rain had forced deviations from the original parking plans and as a result long delays were experienced getting off-base after the show. "Overall, the air show and open house was a resounding success and had a strong impact on both the local surrounding communities as well as the various outer lying communities whose residents travelled to Cannon to enjoy the air show," concluded Col. Tony Bauernfeind, 27th Special Operations Wing commander. The isolated location and limited list of performers made this an easy show to overlook, but being able to see the unique aerial assets of the USAF Special Operations squadrons in action made it worthwhile for this reviewer.

We would like to express our thanks and sincere appreciation to the 27th Special Operations Wing Public Affairs Office, in particular Capt Anastasia Wasem, for their hospitality and assistance during the Open House and to all the Air Commandos at Cannon Air Force Base for their service.





MC-130J Combat Talon II refueling MV-22 Ospreys



AC-130W Stinger II



MC-130J Combat Talon II



MC-130J Combat Talon II



KADEX-2014

REPORT AND PHOTOGRAPHY BY PETER THIVESSEN AND WOLFGANG JARISCH

The 3rd International Exhibition of Weapons Systems and Military Equipment, KADEX 2014, was held from May 22-25, 2014, in the beautiful city and emerging metropolis, Astana, which is the capital of Kazakhstan. Kazakhstan is the ninth largest and the biggest landlocked country on earth. The event took part in the military section of the Astana International Airport.

The exhibition was opened on May 22nd with the presence of high-level Kazakh dignitaries, including Secretary of State Adilbek Dzhaksybekov, Minister of Defence Serik Akhmetov and First Deputy Prime Minister Bakytzhan Sagintaev. After the parade of different military music and brass bands from various departments of the government and independent states the flag for KADEX 2014 was hoisted and with that the event opened.

KADEX (Kazakhstan Defence Expo) has grown to be an event for the Who's Who of the weapons and defence industries. The international character of this event is a unique opportunity for manufacturers and buyers to study and investigate the market and bring a view in the future of military technology.



Sukhoi Su-30SM ©2014 Wolfgang Jarisch

Main sections of the exhibition KADEX-2014 were:

- Land Forces and Navy weapons systems and military equipment
- Aviation and aircraft weapons, air defence systems
- Special purpose weapons and equipment
- IT-technologies and communications
- Logistic and technical support equipment.

Nearly 300 companies from 27 countries followed the invitation from the organizer to demonstrate their latest advance and technical solutions of military technology. This mass of military technology was of interest to many of the visitors. And so official delegations from the Collective Security Treaty Organization (CSTO members Armenia, Belarus, Kazakhstan, Russia and Tajikistan / observers are Afghanistan and Serbia) as well as delegations from India, Israel, Pakistan, Lithuania Turkey, Ukraine and the U.K came also as ambassadors and military attaches from Azerbaijan, Belarus, Germany, Russia, Ukraine, the U.K., the United States, China, France, Tajikistan, Turkmenistan, India, Turkey, Lithuania, Poland, Italy, Iran, Romania, Pakistan, Canada, Belgium, Switzerland, Japan, Denmark, the Czech Republic, Spain, Greece, Austria, the Netherlands, Finland, Georgia and Sweden.

In six pavilions, under first rate conditions, the exhibitors presented their products which consisted of aviation and aviation weapons, drones, air defence systems, information technology, communications and logistics solutions and technical support for troops, weapons and equipment for armies, air forces and navies. The Kazakh industry had 80 stands in the hallways for exhibition. Exhibitors could also use a huge outdoor area. This year's edition is the first time for the Kazakh industry to present their aerospace products. The Turkish industry had Pavilion 4 for its own to give an overview of their products extending from the sea to the space.



The outdoor area was dominated by the world's largest helicopter, the Mil Mi-26T Halo, which is in service with the Kazakh emergencies ministry. The helicopter received an upgrade to a T model after 20 years in storage. It is definitely a huge helicopter. The model on display had two internal fuel tanks each with 7500 liters capacity.



Another large plane in the outdoor exhibition was the Airbus A-400M Atlas, beside the two Russian top fighters, the Sukhoi SU-30SM and the MiG-35UB. The SU-30SM (first flight of red 16 was in February 2014). Also in the static display were two different versions of the multi role transport

aircraft Antonov An-74. One was an An-74TK-200 and the other an An-74T-200A model, both are in service by the Kazakhstan Air Force. One of the two brand new CASA C-295M from the Kazakhstan Air Force was also in the static display.

Interesting for the visitors were the different helicopters. There were several versions from the famous Mil-family in the static area. The new Mil Mi-171E in a wonderful two tone green and brown camouflage, and the older models Mil Mi-17V-5 and Mil Mi-171Sh from the Border Service. The European helicopters in the static were two different Eurocopter EC-145's, but the helicopters were built by Eurocopter Kazakhstan Engineering opposite Astana airport. The Ukrainian company, Motor Sich had an old Mil Mi-8 which was upgraded to a Mil MI-8MSB on display.

The other foreign aircraft in the static display were the US Hawker Beechcraft AT-6 Texan, from the Czech Republic a Zlin Z-242L "Guru" and a Let L-410 UVP-E 20 (this aircraft wore a Russian registration) and the Austrian Diamond DA-42 "Guardian".

The flying display was very small, but it was an exhibition and was not an air show. Every day the following flew in a demonstration: the Airbus A-400M Atlas, and the 4++ generation fighter RAC MiG-35 prototyp piloted by test-pilot Stanislav Gorbunov and navigator Nikolay Murmilov. This MiG version is a derived of the MiG-29K/KUB and MiG-29M/M2 family.



Also in the daily flying program were the Su-30SM fighter which was being piloted by the chief test pilot of Irkut Corporation, Hero of Russia, Vyacheslav Averyanov, and the head of department – instructor pilot of the State Aircraft Staff Training and Operational Testing Center of the Ministry of Defence (Lipetsk), Lieutenant Colonel, Ashot Arustamov. The Sukhoi was definitely the star of the show. The crew demonstrated each day the unique capabilities of this thrust vector controlled fighter. Impressive also the daily displays of the powerful AT-6 Texan and the basic trainer Zlin Z242L Guru. The Kazakhstan Air Force showed helicopter displays from different types and formation flights or rather flybys of six Sukhoi Su-27 M/UBM Flankers, five Sukhoi Su-25 Frogfoots and four MiG-29 Fulcrums.

Visitors and participants witnessed a very powerful and noisy demonstration by Kazakhstan’s ground forces and air defence forces. The scenario was that a combined command overwhelmed a terrorist camp. Different helicopters were in use for this command also as tanks, military vehicles and other equipment. Looking back, it must be said that it was a fantastic and successful event. Around 45,000 visitors came, daily business conferences were organized (nearly 20 a day) and over the event contracts for orders and agreements were signed in a value of approximately \$2.6 billion.

For journalists and visitors who waited on Sunday to the end of the event, they got a rare look for their eyes or lens; the Antonov An-12 from the Irkutsk Aircraft Production Association (IAPO) to pick up the technicians of the Su-30SM.

ASR Media wishes to thank the Media and Communications organization of the Ministry of Defence, Kazakhstan with special appreciation to the Officer of the press-service of the Ministry of Defence, Zhansaya Omarova and her team for their hospitality and perfect organization and support.



Su-30SM above and to the right bottom ©2014 Wolfgang Jarisch



Demonstration of Kazakhstan military power as Special Forces attack a terrorist camp



AN-74 TK-200 ©2014 Wolfgang Jarisch



Mil Mi-171Sh ©2014 Wolfgang Jarisch



Antonov An-12 from the Irkutsk Aircraft Production Association (IAPO) ©2014 Wolfgang Jarisch





Formation of Sukhoi Su-25 "Frogfoot" ©2014 Wolfgang Jarisch



Formation of Sukhoi Su-27M and UBM "Flanker" ©2014 Peter Thivessen



KADEX-2014

MiG 35D Fulcrum-F ©2014 Wolfgang Jarisch



F/A-18 Hornet



WK (Wiederholungskurs) Meiringen, Switzerland

Article and photography by Peter Thivessen

The Swiss Airforce from April 28 to May 16 conducted their Wiederholungskurs, WK (refresher course) exercise at Air Base Meiringen, Switzerland. 200 Airforce personnel and 700 militiamen (reserve) took part in the exercise.

Participants included (8) F/A-18A Hornets from the Fliegerstaffel 11, and (8) F-5E/F Tigers from the Fliegerstaffel 8.

All the Swiss Hornets were flown by the full time airforce pilots, while the Tigers pilots were from the reserve. The runway in Meiringen is from east to west and follows the contours of the valley. The taxiways are quite unusual, one of them routes aircraft to and from the cavern on the south side, crosses a public road.

An essential part of the exercise in Meiringen was the relocation exercise REVITA 2014 from May 13. -15, 2014. Four Hornets and four Tigers were moved from Meiringen Air Base to the airbase of Buochs, a "standby nonpermanent airbase". To see if the airforce is able to move quickly during a crisis all the materials required for this non permanent and only minimally equipped airfield, in order that the flight operations can be performed without restrictions. Due to the bad weather, only 56 movements were carried from the 82 planned. Nevertheless, the exercise leader was "very satisfied" with the results according to Colonel, Peter Merz, Air Base Commander Meiringen of the Swiss Airforce.

The F-5 Tigers will not be seen for much longer. The fleet consists of 54 aircraft and they have been in service since 1978. The Tigers are only used during the day and in good weather, therefore, there is an urgent need for modernization. In 2016, the Tigers will be decommissioned and will be replaced by (22) Saab Gripen Es. Delivery will take place in the years 2018-2021.

The Aviation Magazine wishes to thank the Media and Communication organization, especially the officer of the pressservice, Mr. Jürg Nussbaum for his hospitality and assistance which was much appreciated.



F-5 Tiger



WK (Wiederholungskurs) Meiringen, Switzerland



F-5 Tiger



F/A-18 Hornet



F/A-18B Hornet

Buochs Air Base





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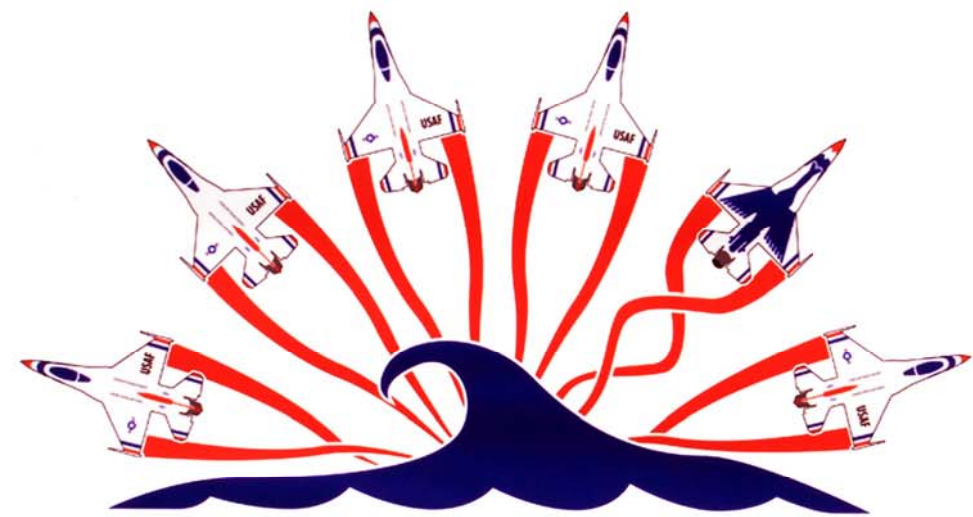
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OC AIR SHOW
OCEAN CITY, MARYLAND

REPORT AND PHOTOGRAPHY BY NORMAN A GRAF

Clear blue skies, warm ocean waters, sunny beaches and airplanes made for a perfect weekend this year at the OC Air Show in Ocean City, Maryland. The air show coincided with both Flag Day and Father's Day and was close enough to the start of summer to ensure large crowds on both days. Although somewhat sparse, the lineup included a little bit of everything: parachutists, warbird fly-bys, civilian aerobatic demonstrations, a modern military tactical demonstration, and, finally, the USAF Thunderbirds.

The Leap Frogs started the action, jumping from an Air Force C-130J Super Hercules. The first parachutist flew in the national flag then narrated the rest of the demonstration. The next jumper dangled a long line of smoke canisters below him, sketching a corkscrew of color on the bright blue canvas of the sky. The next three jumpers joined up in a vertical stack, the upper flyers sitting on the canopy of the man underneath. The lower two jumpers then linked legs and soon the three were streaking earthward in a spiralling horizontal lineup, breaking apart seemingly at the last minute. All of the jumpers made pinpoint landings on the beach just in front of the VIP chalet. Gary Ward in his MX-2 and Greg Connell in his Pitts radial-engined Model 12 biplane provided plenty of high energy aerobatics, both singly and in a tandem demonstration.

Warbirds were next on the agenda, featuring both a fighter and bomber from World War II. Sean Carroll flew a number of very nice high-speed and banking passes in his Yak-9U. Similarly, the B-25J Mitchell "Panchito" made several beautiful passes both from the right and left. Bombing runs were simulated with the bomb-bay doors open and the manoeuvrability of the aircraft was demonstrated with several zoom climbs and banking turns, nicely showing off the plan view of the airframe. This aircraft was sponsored by the Disabled American Veterans and was raising money by selling rides out of a local airport during the weekend.

Then it got loud. Real loud! The Marine's Harrier II jet from MCAS Cherry Point arrived with a high speed pass and delighted the crowd with both its fast and slow action. Slowing to a halt, it pirouetted about its own axis, then descended in hovering flight, whipping up clouds of sea spray. After a few more demonstrations of this aircraft's amazing capabilities it rose straight up on dual columns of sooty exhaust and departed to applause and cheers from the crowds. The Marine's other V/STOL aircraft, the MV-22, did not make an appearance, but a number of feathered Ospreys entertained the spectators by repeatedly catching large fish and flying directly over the crowd line on the return flight to their nests.

The Red Bull Air Force parachute demonstration team showed off their skills next. They first flew their wingsuits for an extended period before deploying their chutes and whistling in for high-speed landings right alongside the crowd-line fence. Normally employed to type out messages in the sky, the GEICO Skytypers instead put on a very nice demonstration of precision formation flying in their vintage warbirds. The team of six SNJ-2 aircraft put on a series of maneuvers designed to showcase the capabilities of the Second World War trainer. Their use of smoke on the crystal-clear day was most effective.

Then, before you knew it, it was time for the headline act, the Thunderbirds. Their high-speed entrance from behind and over the heads of the spectators brought everyone to their feet where they remained for the duration of the performance. Many of the maneuvers were similar to those executed by the Skytypers, but now with afterburner at speeds of several hundred miles per hour! There was sufficient moisture in the air from storms the previous week that each high-g maneuver resulted in billowing streaks of vapor over the wings and vortices streaming from the wing-tip missile rails. Sunday's high show used every inch of the aerobatic box and some new additions to the routine took even veteran viewers by surprise. To make up for the lack of access during the show, team members appeared during the Take Off Party Friday night to mingle with the crowds, answer questions, take photographs and sign autographs.

The air show is visible all along the Boardwalk, although VIP seating and chalets are available at show center at 16th Street. There is even a VIP Skybox on a second story terrace directly at show center for those desiring an elevated view and a sand and saltwater-free environment for their camera equipment. Being a public beach show, there is no formal opening time and, being on the Boardwalk, there are no security checks. Visitors are able to arrive as early or as late as they want, driven mostly by parking considerations. One very nice feature of this show is that people are allowed on the beach, and even in the water, during the show. This was also true in front of the chalets at show center, as long as people maintained a reasonable distance from the seating areas. And, of course, the drop zone for the parachutists was kept clear! Food and drinks were available from stores along the Boardwalk or from vendors on the beach. Airplanes towing banners advertising local restaurants and shops are a staple of summer at the beach. The organizers decided to incorporate them into the show by scheduling two breaks in the action, allowing the banners to be flown overhead and spectators to take a break and patronize some of the advertised establishments. Win-win.

Thanks to the organizers, sponsors, volunteers and performers for another great start to summer on the beach.



- The Navy Leapfrogs, leaping from a C-130, above and to the right.
- Red Bull Air Force in action, in the middle.
- Geico Skytypers in their T-6s, below.





- Gary Ward, MX-2 Aerobatics, top left
- AV-8B Harrier II, VMAT-203 "Hawks", MCAS Cherry Point, left below
- F-16s of the USAF Thunderbirds rest of the pages



WARRIORS OVER THE WASATCH

REPORT AND PHOTOGRAPHY BY NORMAN A GRAF

The “Warriors Over The Wasatch” Open House and Air Show at Hill AFB took place over the weekend of June 28-29. This biennial event celebrates the “Power of Airmen” and combines military demonstrations with civilian aerobatic performances. The USAF Thunderbirds once again highlighted the show this year. Other military performers included the US Army’s Parachute Demonstration Team, the “Golden Knights,” the F-16 Heritage Flight demonstration and a simulated airfield attack by the local 388th Fighter Wing. A large array of military aircraft was also on static display. Civilian performers ranged the gamut from hang glider to jet car, with parachutes, jet planes, biplanes and warbirds in between.

The flying show opened promptly at 1000 with the Golden Knights bringing in the US and the Utah state flags circled all the while by Bill Stein, Matt Chapman and Rob Holland. The trio, calling themselves “The Force,” then put on a nice demonstration of formation aerobatic flying, made all the more interesting as it was a dissimilar flight of an Eagle 580 (Chapman, lead), Edge 540 (Bill Stein, left wing) and MXS (Holland, right wing). Each would also return later for a solo demonstration. Likewise, Buck Roetman in his Pitts S-2S Special and Gary Rower in his PT-17 Stearman put on a formation aerobatic demonstration. Here the difference in performance between the two biplanes was much greater, but the synchrony was just as harmonious. Buck’s solo performance was later interrupted by the launch of Dan Buchanan’s hang glider. Dan paid for this (feigned) intrusion of the airspace by having his streamers chopped off by Buck’s propeller. It was all in good fun and to the amusement of the crowd. Once aloft, Dan put on an impressive display of energy management, coaxing the glider through many intricate maneuvers including the launch of fireworks from the canopy. David Erickson, who actually works at Hill AFB, enjoyed performing for the hometown crowd in his Zlin 50 LS. Red Bull’s Kirby Chambliss put on his usual high-energy rip-roaring demonstration in his Edge 540, beginning and ending with his jaw-dropping Cobra maneuver.

The skies were once again filled with parachutes when the Golden Knights returned for their full demonstration. This was composed of a number of intricate maneuvers including a simulated fouled chute, where the jumper released his main chute before deploying his backup. Thanks to the efforts of the Public Affairs Office, ASR was fortunate to go up with the team in their C-31 Troopship (military variant of the Fokker F27 Friendship) to witness their jumps from a unique angle high above the crowds. Read all about it in an upcoming issue of The Aviation Magazine. The skydivers of the Red Bull Air Force also put on breathtaking displays: one pair freefalling, another pair gliding in their wingsuits before deploying their chutes and screaming in at amazing speeds to pinpoint landings in front of the crowd.

Mark Peterson put on two very nice demonstrations of the aerobatic capabilities of warbirds, the first in his World War II P-51D Mustang fighter “Diamondback” and later in his contemporary Dassault/Dornier Alpha Jet trainer and light attack aircraft. Another jet warbird performance was put on by Greg “Wired” Colyer in his T-33 Shooting Star “Ace Maker.” He seems to take pleasure in using the full extent of the aerobatic “box,” descending so low that he disappeared behind the tails of the Thunderbirds’ F-16s parked at show center. Despite not gaining even that much altitude, Bill Braack took first place in the afterburner category. His staccato bursts of smoke and thunder in the jet car brought the crowds running to the fence for both his high-speed run and his race with Rob Holland later in the day (which he won, at least on Saturday).

Many in attendance were looking forward to seeing tactical demonstrations from modern military aircraft and the 421st Fighter Squadron did not disappoint them. In rapid succession four F-16Cs of the “Black Widows” launched, loaded with missiles and drop tanks, employing full afterburner to take off and quickly gain altitude with their external stores. Flights “Spider One” and “Spider Two” split apart, one to attack the airfield from the north, the other the south. The aircraft simulated both bombing and strafing runs, so came in at different altitudes and attitudes. These passes were accompanied with well-timed ground pyrotechnics provided by the local EOD teams. Their high-g maneuvers extracted lots of vapor from the moist air and their banking turns provided beautiful top-side views into the cockpits for the multitude of photographers. The grand finale was a wall of fire which exploded behind the parked Thunderbirds after the final bombing run. The four Vipers then passed in review in close formation, peeling off in one second intervals to land. Major Mark “Juice” Whisler also performed a short tactical demonstration of the Fighting Falcon’s capabilities before being joined by Greg Anders in the P-51D Mustang “Diamondback” for the Heritage Flight. And finally, of course, came the Thunderbirds, performing their high show in the beautiful blue skies over the Wasatch. It was the perfect ending to a picture-perfect air show. The crowds barely thinned since many were waiting to get an autograph or a photo with one of the Thunderbird team members.

After the cessation of flying there was an hour to go before the gates closed and there was still much to see. Hill AFB is host to the Ogden Air Logistics Complex which provides maintenance for the F-35 Lightning II, F-22 Raptor, F-16 Fighting Falcon, A-10 Thunderbolt II and the C-130 Hercules. Traditionally, a “Depot Flight” composed of these aircraft has been flown during the air show. That was unfortunately not the case this year, although a very nice grouping of these aircraft was on static display. The bare-metal Hercules was particularly impressive, gleaming in the bright sunlight. There were also plenty of maintenance personnel on hand to answer the myriad questions from the crowds.

Most of the larger aircraft were open for tours and many of the fighters and trainers had their cockpits open for viewing. The line for the B-1B Lancer cockpit tour stretched the length of its fuselage from early morning until the security forces started their sweep of the area at 5PM.

Weather conditions were ideal and an estimated half a million visitors attended the two-day show, far surpassing the 85,000 hardy fans who braved the cold and rain in 2012. Parking was close-in on base with both park-and-walk and park-and-shuttle options available. Traffic was handled very well and security checks proceeded quickly. VIP chalets were set up just to the right of show center but there was plenty of open space to set up folding chairs or stake out a spot on the fence. With the gates opening at 0800, visitors had plenty of time to view the extensive lineup of aircraft on static display and interact with the aircrews and airmen before the flying began. The website had both detailed access and ramp layout maps as well as up-to-date schedule and performer information. An area was set aside for the hearing impaired and a group of volunteers provided signed interpretations of the narration during the air show. We had never seen this before and were very impressed by this innovation. Hopefully this will catch on at other shows. Photography was challenging in the morning light, but by the afternoon the sun had moved behind the flightline, providing nice over-the-shoulder lighting. The mountains in the distance and bright puffy clouds provided a beautiful backdrop to the flying action. Food courts, restrooms, water and first aid stations were conveniently distributed throughout the grounds. Lines were therefore short. Prices for beer and food were quite reasonable and many of the booths were manned by base units or squadrons.

We would like to express our thanks and sincere appreciation to the 75th Air Base Wing Public Affairs Office for their outstanding hospitality and assistance during the Open House, in particular Mr. Richard Essary in Media Relations for arranging media access and SSgt Michael McCool for his support during the show.



- Golden Knights, top left
- Red Bull Air Force, top middle
- Jon DeVore, Red Bull Air Force skydiver, top right
- "The Force": Rob Holland, Bill Stein & Matt Chapman, lower left
- Euro-NATO Joint Jet Pilot Training Program Instructor Pilot, lower middle
- USAF Thunderbirds parked on the apron.



Dan Buchanan





- Dassault/Dornier Alpha Jet, above
- B-52H in front of the Control Tower, bottom left
- F-16s of the 421st FS "Black Widows"
- PT-17 Stearman, bottom right





MXS, Rob Holland



USAF Thunderbirds



Eagle 580, Matt Chapman



Red Bull Edge 540, Kirby Chambliss



Heritage Flight: P-51D Mustang "Diamondback" & F-16C



T-33 Shooting Star "Ace Maker"



C-130



Every two years, A-10 squadrons from around the world come together for several days to share in the camaraderie and fellowship of the world's premier Close Air Support fighter community. A number of social events are organized to reinforce their esprit de corps, including remembrance ceremonies for fallen comrades. But the primary reason to assemble aircraft and crews is to engage in an intense round of bombing, missile, and tactical gunnery competitions. The event is hosted by the squadron which won the previous competition and, as the 357th Fighter Squadron won in 2012, this year's meeting was held at Davis-Monthan AFB from July 9 to 12.

The US Air Force used to hold a series of air-to-ground gunnery and bombing competitions at Nellis AFB called "Gunsmoke", the last of which took place in 1995. In 2000 the A-10 community decided to revive the tradition of such a biennial competition, but, unlike "Gunsmoke," which included multiple airframes, this would be limited to the A-10. Although officially known as the Thunderbolt II, the A-10 is almost universally referred to as the Warhog, or Hawg for short. Hence "Hawgsmoke."

Invitations go out to every A-10 squadron, and except for those actively deployed, most squadrons send a team of four aircraft plus support crews. We were privileged to be invited on base to observe arrivals on July 9. It was a unique opportunity to see aircraft from so many different units gathered together on the tarmac. The competitions took place the next day at the Barry M. Goldwater Range (BMGR). This vast training range consists of almost two million acres and is located in the Sonoran Desert in southwestern Arizona between Yuma and Tucson and is divided into two sections, one for the Air Force, the other used by the Navy and Marines. The 56th Range Management Office, located at Luke AFB, manages the eastern sector of the range, known as BMGR-East. Marine Corps Air Station Yuma oversees operations on the western portion of the range known as BMGR-West. The 355th Fighter Wing Public Affairs Office had arranged an opportunity for the media to observe the gunnery portion of the competition. We were heading out to Range II, located just south of Gila Bend, AZ.



Since this is roughly a three-hour drive we needed to get an early start: the bus left the parking lot at 0630. Even so, by the time we arrived, the competition had already begun. After a short safety briefing we were allowed to climb up the stairs on the small control tower and prepare for the next team.

This year's Hawgsmoke competition focused on forward firing: the participants competed in high, medium, and low-angle strafes. Each team is composed of four pilots, and each aircraft has the same number of rounds of ammunition. Although the high-angle strafing took place in the distance and was difficult to photograph, the low-angle range was remarkably close to the tower. For the low-angle strafing, a large cloth target is strung up between two posts; cameras and acoustic panels were set up nearby to accurately calculate each pilot's hits. During our time on the range we observed a number of strafing passes by several of the teams. The aircraft orbited the range in a large circle. Each individual aircraft was then "cleared hot" by the Range Control Officer (RCO), meaning that the target was clear and the pilot was authorized to fire live ammunition. Lining up on the target-line, the pilot leveled out, descended towards the target and fired off a short burst. It really is a sight to see and the sound of the GAU-8 "Avenger" cannon is unmistakable. It is at first somewhat disorienting to see the muzzle smoke, then see the impact of the 30mm rounds near the target, then hear the impact of the rounds and only last of all hear the buzz-saw report from the cannon on the aircraft.

It's a fine lesson in the theory of relativity: the muzzle velocity of the rounds is three times the speed of sound, meaning that the sound of their impact arrives much quicker than the sound of their firing. After firing, each pilot quickly flipped the aircraft on its side and engaged in a tight, climbing turn, giving us a beautiful view into the cockpit. Occasionally the pilot would wave or otherwise acknowledge the presence of the RCO.



Accompanying us on our tour was a group of Airmen training to be Air Traffic Controllers. They spent most of their time in the tower itself, paying close attention to the activities of the RCO as he visually tracked the position of each aircraft, inspected the range to make sure it was clear at all times, and ensured that the aircraft finished their strafing before crossing the foul line. It was a perfect lesson in real-time, fast-action air traffic controlling.

All too soon it was time to board the bus for the three hour ride back to Tucson. Despite the long drive and the 100-plus degree heat standing out in the Sonoran Desert, it was a fantastic opportunity to observe the A-10 do what it does best, engage in Close Air Support. Due to budget cuts, the USAF has several times proposed retiring single-mission close-support aircraft like the A-10, but just like the Warthog itself, the program seems to take a lot of punishment but survive in the end. For now, at least, its immediate future seems to be secure.

The winner of this year's Hawgsmoke competition was the 47th Fighter Squadron, which just recently moved from Barksdale AFB to Davis-Monthan AFB, exchanging their BD tailcodes for DP. Congratulations to the "Terrible Termites!"

ASR Media would like to thank the staff of the 355th Fighter Wing Public Affairs Office for their hospitality and all of their support during our visit, in particular 2d Lt. Ranaweera and SSgt Ruiz. Thanks also to the "Dragons" for hosting such a fantastic meet. We'll see you back in Tucson in 2016.

The exercise included teams from:

- 45FS, Davis-Monthan AFB
- 47FS, Davis-Monthan AFB
- 66WPS, Nellis AFB
- 74FS, Moody AFB
- 75FS, Moody AFB
- 76FS, Moody AFB
- 104FS, Maryland ANG
- 107FS, Michigan ANG
- 163FS, Indiana ANG
- 190FS, Idaho ANG
- 303FS, Whiteman AFB
- 354FS, Davis-Monthan AFB
- 357FS, Davis-Monthan AFB
- AATC/422TES, Nellis AFB

Below are more results from Hawgsmoke 2014:

Overall Top Range teams

1. 104FS
2. 190FS
3. 76FS

Overall Top Maverick teams

1. 104FS
2. 47FS
3. 75FS

Top Tactical Team

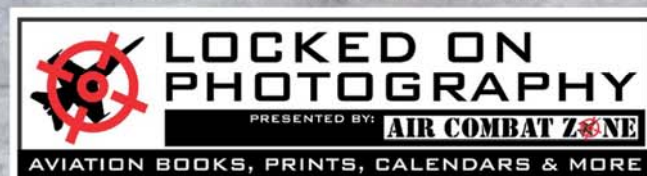
1. 47FS
2. 66WPS
3. AATC/422TES



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Turkish F-4E/2020s

The Anatolian Eagle Training is conducted at the 3rd Main Jet Base at Konya. The city of Konya is located in the central region of Turkey, 1200 m above sea level with a population of approximately 1.700 000 persons.

Similar in scope to “Red Flag” and “Maple Flag” exercises “Anatolian Eagle” is the only tactical training center between Europe and Asia minor. The operational environment covers an area of 300x400 km and without any restrictions over the air space. The Training Center develops scenarios in line with the participant countries and arranges missions according to their training needs.

Since the beginning of Anatolian Eagle from June 2001 until 2013, 13 countries were invited and participated in these important exercises. In this period 2,376 aircraft and 28,250 personnel made it possible to perform 20,258 missions.

In this years event 1640 personnel were deployed with 1,122 national, 494 international and 24 from the NATO. A total of 78 aircraft were involved in Anatolian Eagle 2014-2. Qatar was the 14th nation to attend for this major exercise.

The elements of “Anatolian Eagle” are split into the White HQ the Red and the Blue Force. The White HQ does the operation for the training scenarios, monitoring and commanding, evaluating and analyzing the training. The Red Force is the training aid for the Blue fighters with 16’s and F-4E’s. The Blue Force is the primary target audience.

Another element of “Anatolian Eagle” is the use of different ground threat systems like the SA-6 “Gainful”, SA-8 “Gecko”, SA-11 A/B “Gadfly”, ZSU-23-4 “Gundis”, Skyguard Sparrow and Hawk.

Anatolian Eagle's intend to provide:

- an international training environment to display the training level and capability to other participant countries
- the fighter pilots the opportunity to apply their own tactics in joint multi-aircraft missions
- a forum enabling exchange of ideas and lessons learned

According to the Training Centre their function "is aimed to train the participants as they fight on various mission types and train them to survive, and maintain their combat readiness".

Anatolian Eagle 2014-2 participating countries:

Turkish Air Force:

40 x F-16 from the airbases Konya (132 Filo-Dagger), Ankara/Akinci (141 Filo-Wulf and 142 Filo-Gazelle and 143 Filo), Merzifon/Amasya (151 Filo-Bronze and 152 Filo-Raiders), Diyarbakir (182 Filo-Hawk), Balikesir (191 Filo-Cobra and 192 Filo-Tiger).

11 x F-4E/2020s from the airbases Malatya/Erhac (171 Filo-Pirates) and Eskisehir (112 Filo-Devil)

1 x KC-135R

1 x C-160

1x CN-235

1 x EW-7T (Boeing 737-7ES)

Royal Air Force, UK

6 x Typhoon FGR4, 3.Sqn and XI Sqn., Coningsby

Spanish Air Force

6 x EF-18M, Ala 12, Madrid/Torrejon

6 x EF 2000, Ala 11, Sevilla/Moron

Qatar Air Force

4 x Mirage 2000-5, 1st FW, Doha

Jordan Air Force

3 x F-16 Al Azraq, As Shaheed Muwaffraq al Salti AB

Nato

3 x E-3A Geilenkirchen, Germany

The Aviation Magazine (formerly ASR Media) would like to express our thanks and appreciation to the Turkish Embassies in Germany and Austria, especially to the Operations Commander Major Hasan Saffet Celikel, the headquarters of the Turkish Air Force in Ankara, Major Mesut Yurtan, 1st Lt. Mehmet Aslan, 1st Lt. Umut Uskup and all the personnel on the base who assisted us for their support and hospitality. Hope to see you again next year!

©2014 Peter Thivessen



Spanish EF 2000



CN-235



Spanish EF-18M



Turkish F-4E/2020s



Qatar's Mirage 2000-5



F-5

Film strip images ©2014 Wolfgang Jarisch

©2014 Peter Thivessen



Turkish F-16



©2014 Wolfgang Jarisch

Jordanian F-16



©2014 Wolfgang Jarisch

Turkish F-16



Film strip images #7 to 10A ©2014 Peter Thivessen #11 –14 ©2014 Wolfgang Jarisch



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RAF Typhoon FGR4



©2014 Peter Thivessen

F-4E/2020s



NATO TIGER MEET 2014

REPORT & PHOTOGRAPHY BY PETER THIVESSEN & WOLFGANG JARISCH



Rafale, EC 01/007 ©2014 Wolfgang Jarisch

NATO Tiger Meet 2014 was held from June 16th -27th June at Schleswig-Jagel airbase in northern Germany, about 100km north of Hamburg. This year's meet included all types of air-to-air and air-to-ground and a wide variety of support missions, comprising CSAR and large COMAOs (Composite Air Operations).

For the second time since 2004, the Tactical Air Force Squadron (TaktLwG) 51 „Immelmann“ was the host squadron for Europe's largest air exercise. More than 70 aircraft and helicopters from 18 squadrons and from 11 nations were involved in this year's exercise.

The training area covered an airspace 300km by 300km, from the Dutch North Sea coast in the North West of Amsterdam to the German North Sea bay shore lines all the way to the Danish airspace.

The large scale international air exercises helps to standardize the operational procedures, to improve the interactions of armed forces and minimize any potential friction points. Air operations that cover an area of 900 square kilometres need perfect planning. The Planning Staff and the team from TaktLw 51 "I" were praised for their fantastic work in the "White Cell" (Planning Cell) as they ensured the safety of all the participants involved.

All participants were briefed thoroughly about the local regulations before the aircraft were launched twice a day to fulfill their different tasks in joint missions.

Participant countries and aircraft:

Germany

4 x Tornado, TaktLwG 51 "Immelmann", Jagel

6 x Eurofighter, TaktLwG 74, Neuburg

1 x EC 665 Tiger, Kampfhubschrauberregiment 36 „Kurhessen“, Fritzlar

Switzerland

5 x F-18, Fliegerstaffel 11, Meiringen

Netherland

5 x F-16, 313 Sq., Volkel

Belgium

5 x F-16, 31 Sq., Kleine Brogel

Czech

4 x JAS39 C/D, 211 Sq., Caslav

2 x Mi-24V, 231 Sq., Namest nad Oslavou

1x Mi-171s, 231 Sq., Namest nad Oslavou

France

3 x Rafale M, 11. Fotille, Landiviseau

3 x Rafale, EC 01/007, Saint Dizier

2 x Mirage 2000-5, EC 05/330, Mont de Marsan

Hungary

5 x JAS 39 Gripen, 59/1 Sq., Kecskemét,

Poland

5 x F-16, 6.ELT, Poznan-Krzesiny

Turkey

5 x F-16, 192 Filo, Balikesir

UK

1 x Merlin HM2, 814 Sq., NAS Culdrose

Austria

3 x Saab J105 OE, Düsentruerstaffel, Linz-Hörsching

Nato

1 x E3A Sentry, operating from Orland, Norway

At the beginning of the exercise, the 6th Fighter Squadron from Poznan-Krzesiny, Poland and the 59/1 Puma Squadron from Kecskemét,, Hungary were added as full members of the NATO Tiger Association. The Taktische Luftwaffengeschwader (TaktLwG) 74 from Neuburg / Germany with the Eurofighters was accepted as provisional member to the NTA. In addition to the host squadron the "Bavarian Tigers" were the second German Tiger Squadron. Currently there are 23 squadrons from 16 nations in the NTA Association.

We would like to congratulate "STAFFEL 11" from Switzerland for winning the Silver Tiger 2014.

The Bavarian Tigers, TaktLwG 74, Neuburg, won the award for the Best Paint scheme, for their Eurofighter Typhoon in complete Tiger livery.

The NATO Tiger Squadrons will reconvene next year in May at Konya AB, where NTM'15 will be hosted by 192 Filo of the Turkish Air Force.

The Aviation Magazine (formerly ASR Media) would like to thank the the Press Office from the (TaktLwG) 51 "Immelmann", for all of their support and hospitality during our visit, in particular Oberstabsgefreiter Rober Stock for his outstanding assistance.





F-16 ©2014 Wolfgang Jarisch



Eurofighter, TaktLwG 74 ©2014 Peter Thivessen



F-18, Fliegerstaffel 11 ©2014 Wolfgang Jarisch



F-16, 31 Sq ©2014 Peter Thivessen



Rafale M, 11. Fottile, ©2014 Wolfgang Jarisch



Mirage 2000-5, EC 05/330 ©2014 Wolfgang Jarisch



Tornado, TaktLwG 51 ©2014 Peter Thivessen



Saab J105 OE ©2014 Wolfgang Jarisch



Bücker Bü 131 "Jungmann", ©2014 Peter Thivessen

Rafale M



©2014 Peter Thivessen



EC 665 Tiger ©2014 Peter Thivessen

Rafale M



©2014 Peter Thivessen



Czech JAS39C ©2014 Peter Thivessen

Shizuoka AB Open Day

PHOTOGRAPHY BY TAKESHI SHINODA



Mitsubishi F-15 Eagle fighters



Eurocopter Dauphin AS365N1
Shizuoka Prefectural Police



Fuji T-7



Mitsubishi H-60 UH-60J F-16C



Shizuoka AB ●pen Day



Mitsubishi H-60 UH-60J F-16C



Fuji T-7



T-6 Texan



©2014 Takeshi Shinoda

RIAT 2014

REPORT BY ROBERT KYSELA
PHOTOGRAPHY AS NOTED

The Royal International Air Tattoo (RIAT) is well known to many of our readers, so there is no real need for a more detailed introduction to Europe's biggest annual air show. RIAT 2014 was held over the weekend of the 11th to 13th of July 2014 at RAF Fairford.

As usual, other celebrations were also taking place including the anniversary of the 50th display season of the famous RAF aerobatic team, the Red Arrows. To help commemorate this special event several other aerobatic teams were also in attendance including the Patrouille Suisse, the Patrouille de France, the Orlik Team from Poland, the Breitling Jet Team and last but not least the Frecce Tricolori of the Italian Air Force. In total, some 240 aircraft were in attendance at RIAT, including the very rare participation (and very last appearance at an air show) of an Hellenic Air Force Chance Vought A-7 Corsair II (unfortunately on static display only) while the incredible Polish Sukhoi Su-22M3 "Fitter" display team delivered a great performance that was definitely the highlight for fans of military fast jets. While not a very agile aircraft, the Polish pilots nevertheless managed to provide a stunning display of close formation flying (one aircraft with wings fully swept backward, the other with wings fully extended) and a series of fast crossover maneuvers. Some of the other fast jet displays were definitely not as good as in previous years which was quite a disappointment, for example the Swiss Air Force Boeing F/A-18 Hornet display and even worse the flying display of the Boeing F/A-18F Super Hornet. Both aircraft not only performed too high and too far away, but their entire program was not what many air show spectators had come to expect from seeing this extremely agile aircraft fly over the past many years.

The RIAT organizers did however manage yet again to bring a wide range of fast jets to Fairford, some of which have been seen only quite rarely at displays over the past few years. Apart from the aforementioned Su-22 performance another big surprise was a fantastic display of a Panavia A-200 Tornado and Aeritalia/Aermacchi A-11 of the Italian Air Force.

Tornados were quite a common sight at many airshows up until 2010, however since the British Air Defense Variant (ADV) was replaced by the Eurofighter EF-2000 Typhoon, the Tornado Gr Mk 1's and Gr Mk 4's are no longer performing displays so they can now be seen on static display only, which is a big shame as the Tornado always was a great crowd pleaser.

Another highlight at RIAT was the Airbus A400M, which once again displayed its capabilities with a remarkable performance. The first A400M's have already been handed over to the Armée de l'Air and the Turk Hava Kuvvetleri with another 14 aircraft to be delivered in 2014 to the Royal Air Force, while other customers include the Luftwaffe, the Turk Hava Kuvvetleri, and the Royal Malaysian Air Force.

Although much smaller and even more agile is the Alenia C-27J Spartan of the Italian Air Force. The loops and barrel rolls flown by this medium sized cargo aircraft are still an extremely impressive sight, even though its forerunner, the Aeritalia G-222, could also do this many years prior. Apart from the fast jet and cargo plane action at RIAT 2014 there were also a couple of outstanding helicopter displays including one from an Aerospatiale AS332M1 Super Puma of the Swiss Air Force and another from the very popular Boeing H.C2A Chinook of the Royal Air Force.

Conclusion: The RIAT organizers, the Royal Air Force Charitable Trust Enterprises, once again were able to put on a great show despite some considerable difficulties. The main attraction, the Lockheed Martin F-35 Lightning II, which was highlighted on the RIAT website, posters and almost everywhere never actually eventuated, but nevertheless the Royal International Air Tattoo show still holds the leading position within the worldwide air show business.



- A400M, above
- Red Arrows, BAE Systems Hawk T1, below

Both images ©2014 Robert Kysela

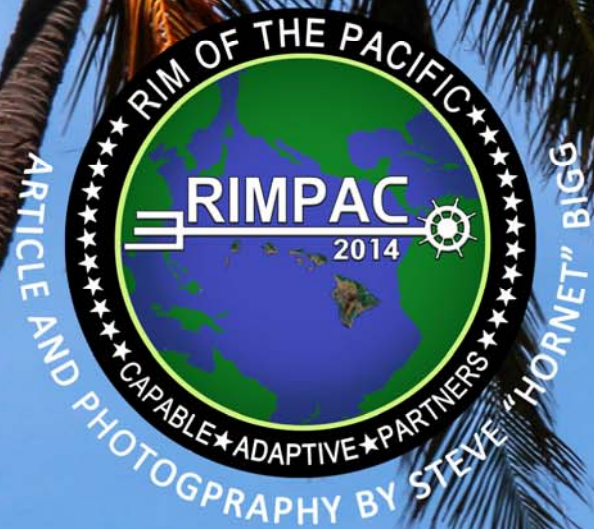




- Breitling L-39s left top ©2014 Robert Kysela
- Saab 105 OE from the Austrian Air Force, left bottom ©2014 Robert Kysela
- Avro Lancaster and a Spitfire, RAF right top ©2014 Peter Thivessen
- AN-26, Hungarian Air Force, right bottom ©2014 Takeshi Shinoda

Both images ©2014 Robert Kysela





CC-130T of the RCAF

What do you get when you combine 49 navy surface ships ranging from small support ships up to the USS Ronald Reagan Nimitz class aircraft carrier, 6 submarines, over 200 aircraft and a combined troop strength in excess of 25,000 people? The answer is RIMPAC 2014. RIMPAC stands for "Rim of the Pacific" and it's a biennial naval exercise held on, over and around the Hawaiian islands. As the numbers infer, it is indeed the world's largest naval exercise. The 2014 exercise had 22 nations participating with others joining as observers to ready themselves for the opportunity to join future editions of the exercise.

RIMPAC was first held in 1971 and became a biennial exercise in 1974; primarily drawing participants from countries that share the shores of the Pacific Ocean. As it has grown, the Navies, Air Forces and ground forces from around the globe have reaped the benefits of attending RIMPAC over the 44 years it's been running. Australia, Canada and the United States all value the exercise enough to have been at all 24 editions of the exercise. By far the most significant first time participant at RIMPAC in 2014 was the Peoples Liberation Army Navy (PLA(N)) of China. The PLA(N) officially brought 4 surface ships supported by 2 helicopters to the exercise but created some controversy when a 5th intelligence collection ship arrived and remained near the waters the exercise was being conducted in.

The full list of participant countries includes: Australia, Brunei, Canada, Chile, Colombia, France, India, Indonesia, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, People's Republic of China, Peru, Republic of Korea, Republic of the Philippines, Singapore, Tonga, United Kingdom, United States.

Browsing through the list of assets the United States brought to the exercise it's very easy to see just how significant RIMPAC is to their forces. The list is even more significant in light of the fiscal restraints the US military currently find themselves working within. For a full list of who brought what to RIMPAC you can visit the website of the Commander, U.S. Pacific Fleet at <http://www.cpf.navy.mil/rimpac/2014/participants/>

The exercise is primarily a naval exercise but the reality of almost all modern military operations is that more than just one component, sea, air, ground or special forces, is going to be involved. RIMPAC is no different and therefore includes a substantial air warfare component referred to as the Combined Forces Air Component (CFAC). In 2014 the "Combined Forces" refers to the combination of over 200 aircraft brought to RIMPAC by 13 of the participants. Responsibility for the operations of all these aircraft fell under the command of the CFAC Commander, Air Commodore Chris Westwood from the Royal Australian Air Force (RAAF) and his Deputy Commander Colonel David Lowthian of the Royal Canadian Air Force (RCAF). Together Air Commodore Westwood and Col. Lowthian led roughly 4000 people, some 200 of whom were located in just the Air Operations Center (AOC). Their mission was to ensure that the objectives set out by each country during the planning for RIMPAC could be completed during the roughly 3 week air campaign element of the exercise.

While training objectives are the primary reason participants come to an exercise like RIMPAC, when you ask those who have had the opportunity to attend several such exercises what the most significant benefit they have taken away with them is, the answer is routinely the building of new relationships. On this point Col. Lowthian said "One of the by-products of these types of operations or exercises is that, and this is what I portray to those who are participating in RIMPAC, is that you are going to leave here and you're going to be able to solve problems and face challenges and develop solutions that only you as an individual can bring to the table and it's by virtue of the connections that you made internationally." A reality that bears its fruit during coalition operations.

The exercise is held in an Unclassified environment. When asked how the armed forces of 22 nations can bring their troops and equipment together and operate as a combined force without having to share classified information about how they operate, Col. Lowthian said "every participating nation (is permitted) to do what they need to do without being bound by what would otherwise be caveats that you would experience on operations. I think the unclassified nature of the exercise allows each nation to benefit greatly, and at the same time look after their own operational security areas. With 22 nations, that's going to happen. And another important aspect I've learned as well when you have an unclassified exercise, is the lessons learned and the best practices that come out when you publish them. They're more available. That's what we have to be mindful of is that we're getting much better at sharing best practices, lessons learned, and having an unclassified environment to also enhance that."

Just several days into the flying operations, Colonel David Moar of the RCAF explained how things ramp up during the exercise with respect to the specific training goals "We're going to fly the entire scope of missions that we would train to over a course of an entire year. It's a graduated sort of approach we're taking - a crawl/walk/run approach to flying operations. So for the first four to five days, all we were focussed on is BFM - Basic Fire Manoeuvres - which is dog fighting, air combat manoeuvres. Those are a little bit more simple missions; they're either one vs one aircraft, maybe two vs one, or two vs two. And what we're doing to get the most out of RIMPAC is we're operating with our American brothers. So we have the F22 unit that's here, the F15 Eagle unit, and an F16 unit, as well. We're doing dissimilar air combat to get some exposure fighting different platforms. So that's what we've been doing thus far." As the exercise progresses "we're going to be shooting some air to air missiles in about a week, and then after that is done, what we're going to do is run into a free play stage of the exercises, and during that free play stage of the exercise, it's more like what we would see in a real scenario or conflict where the squadron will be tasked to do a variety of different missions. We'll get a tasking message to find out what we're doing the next day and we'll prepare for that mission and then we'll go out and support the commanders' intent by flying that mission. Again, it could be any range of missions from protecting the boat, to maybe doing some air to surface type of interdiction, something like that depending on what the scenario is. So that's going to be the ultimate end force of this exercise is that free play stage, where we exercise the full range of our capabilities, but with very little notice."

Early in the exercise elements of the CFAC were tasked with supporting a Humanitarian Assistance, Disaster Relief (HA/DR) operation that was rolled into the overall RIMPAC operations. The HA/DR scenario was modeled on the aftermath of a category 3 hurricane hitting a set of islands represented by Hawaii. Over the course of several days a coalition of forces and local Hawaiian civilian agencies responded to the scenario. A field hospital was setup on Ford Island in Pearl Harbor and prepared for managing the wounded. Volunteers were inflicted with fake injuries ranging from severe cuts to multiple compound fractures and foreign object impalements using very realistic makeup and special effect techniques called "mouflage" to provide an almost disturbing degree of realism to the scene. U.S. Army Blackhawk and Chinook helicopters of the 25th Combat Aviation Brigade were used to airlift the most seriously injured to hospitals throughout 5 of the Hawaiian islands. Support was provided by the Japanese Self Defence Force in the form of supplies delivery by an SH-60K Seahawk helicopter while overhead, unseen in the skies above Pearl Harbour, an RCAF CP-140 Aurora provided surveillance data to ensure the safety and security of the field hospital and it's temporary airfield. The airfield allow for delivery of supplies and evacuation of wounded while facilities damaged by the hurricane were repaired.

The US Army's new AN/MSQ-135 Mobile Tower System (MOTS) was deployed at the airfield to provide air traffic control services to the operation.

Joint Base Pearl Harbor-Hickam (JBPHH) saw the majority of the "fast air" or fighter jet traffic at RIMPAC with the exception of the U.S. Navy F/A-18 Hornets and Growlers that were operating aboard the USS Ronald Reagan. Tanker and transport traffic was also focused at JBPHH. On the northeast shore of Oahu, Combined Task Force 172 flew from Marine Corps Base Hawaii at Kaneohe Bay. CTF172 exclusively operated all the Long Range Patrol (LRP) aircraft at RIMPAC and played a unique cross component role. Tasked with many duties including anti-submarine warfare, Colonel Iain Huddelston, Deputy Commander of CTF172 explains how the task force fit into the bigger RIMPAC picture; "So what the maritime component commander has done is he's divided his battle space into these task forces, and he's divided his responsibilities for certain parts of the battle to these various CTFs (air, land, maritime and special forces). But the interesting thing about maritime patrolled aircraft, or long range patrol aircraft, is that we are here to service each and every task. So that's why we have the whole CTF172 to ourselves. So we're a task force of our own supporting all the other maritime task forces (in the maritime component), and then we'll also step out and support the air component commander, land component commander and the special operations component commander when and if required, or directed." For this reason CTF172 had members embedded into each component at the exercise to coordinate the individual requirements for LRP so CTF172 assets could be tasked accordingly.

USS Ronald Reagan (CVN 76), forward, and Japan Maritime Self-Defense Force Hyuga-class helicopter destroyer Ise (DDH 182) travel in formation forward of amphibious assault ship USS Peleliu (LHA 5) during RIMPAC Exercise 2014. (U.S. Navy photo)





With over 200 aircraft from 13 countries all working to meet significant training goals within less than a month's timeframe while deployed away from their home bases, the level of effort and co-ordination required to pull off a successful exercise like RIMPAC 2014 is almost unbelievable. The fact that those goals are met and everyone leaves considering their participation well worth while is a testament to the level of training, skills and professionalism brought to the exercise by its participants.

The Aviation Magazine would like to extend our sincerest thanks to the US Navy's Lieutenant Lenaya Rotklein and Ensign Ashley Nekoui and the RCAF's Captain Jeffery Noel for all their effort to make covering RIMPAC 2014 an outstanding experience.



- RCAF Airbus A310 CC-150T tanker, right top
- USN Grumman C-2 Greyhound, below





RCAF Hornet refuelling

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RCAF CC-188B and A



US Army UH-60 Black Hawk



Japanese Mitsubishi H-60



RAAF P-3C Orion



- Hawaiian Air Lines Airbus A330, top
- USAF C-17, middle
- US Army Blackhawk bottom, all ©2014 Steve Bigg



USN photo The Royal Australian Navy Collins-class submarine HMAS Sheean (SSGT 77)



USN EA-18G about to land on the USS George Washington aircraft carrier, note the Littoral combat ship USS Independence (LCS 2) in the background USN photo



The USS Peleliu (LHA-5) is a Tarawa-class amphibious assault ship of the United States Navy.

USN photo



Aircraft Movements in Malta (January - August 2014)

Report and Photography by Ray Biagio Pace unless noted

Aircraft movements in Malta in the first 8 months of the year proved to be yet again very interesting with a good mixture of aircraft visiting us – be they civil, business jets, cargo or military.

Undoubtedly the most awaited arrival this year was that of the national airline - Airmalta A320-214 registration 9H-AEI in Retro livery on the 16th April branding the original colours since the airline started operating in 1974. The aircraft had arrived from the leased company with Interjet colours on the 7th April before travelling to Ostrava for the new paint job. Aircraft arriving for maintenance in the various Malta maintenance facilities were also on the increase. Most were from Lufthansa and Easyjet but airlines such as Brussels Airlines, Air Afrique, Vueling, Virgin Atlantic, and TAP also sent their aircraft for maintenance in Malta.

Military movements are always greeted with the usual great enthusiasm. The Saudi Air Force Typhoons continued to dominate military movements flying in from Warton base in the UK on delivery to Saudi Arabia on delivery flights for a night stop at the Malta International Airport. Performing some touch and go's and low flypasts are an added bonus for the Maltese spotters. Other military movements included the US Navy Drone N17 which entered the Malta Grand Harbour on the US Simpson; the Royal Netherlands Navy NH-90 helicopter; the Korean Navy Lynx MK99; the Belgian Air Force Alouette III; the Venezuelan C-130H; the US Air Force and the Royal Air Force C-17's.

There was a steady increase of Private Business Jets and other private aircraft arriving in Malta, notably in conjunction with the Maltese Government Residential Scheme aimed for investments in Malta by foreign businessman. Various Government Business Jets also made an appearance in Malta – amongst these were the Kingdom of Saudi Arabia Gulfstream IV with the Saudi Arabian Finance Minister on board.

Other recent interesting movements still ongoing are due to the new Libya Crisis, where various governments are using Malta to evacuate their nationals working in war-torn Libya via seaports then through Malta International Airport. Injured people are also being brought to Malta via Air Ambulances. Aircraft hit by mortar also managed to escape Tripoli for repairs in Malta and for their own safety and operations.

The forthcoming Malta International Airshow 2014 which is being held on Saturday 27th and Sunday 28th September will, as usual be the main highlight for Maltese Spotters this year. This year's Airshow will see a record 4 aerobatic flying teams participating - The Red Arrows, Frecce Tricolori, Spanish Patrulla Aguila and the Turkish Stars. Other flying aircraft will be the Swiss Air Force F18C Hornet, The Belgian Air Force F16AM and the Czech Air Force Alca L-159. Interesting static aircraft include the German Air Force Tornado IDS, the Hellenic Air Force F-4E Phantom II, the Italian Air Force AW139 helicopter, and the NATO E3A Sentry. More information can be obtained from the Airshow website <http://maltairshow.com/> whilst a full report will be published in the next issue of The Aviation Magazine.

Background image Saudi Arabia Air Force Typhoon reg ZK-390



Air Malta A320-214 reg 9H-AEI (in Airmalta retro livery after the paint job above, and the same below before)



Air Malta A320-214 reg 9H-AEI prior to the new livery



Air Baltic B737-36Q reg YL-BBJ



Belgian Air Force C-130H reg CH-08



Avent AV Cargo MD11 reg Z-BAM



Go2Sky B734 reg OM-GTA, above. Lufthansa A340-300 reg D-AIFE, below.



Emirates B777-331 reg A6-EMG, above. Petro Air Embraer 170/175 reg 5A-PAB, below.





NIKI Embraer ERJ-190-100LR reg OE-IXG



Travel Service B737-8FN(WL) reg OY-TVL



RAF C-17 reg ZZ174 above. Ryanair B737-8AS reg EI-DCL (Retro livery)



Turkmenistan IL76 reg EZ-F247, above. Wizz Air A320-232(W) reg HA-LWY, below.





©2014 Keith Pisani

Venezuela Air Force C-130H reg FAV-4951



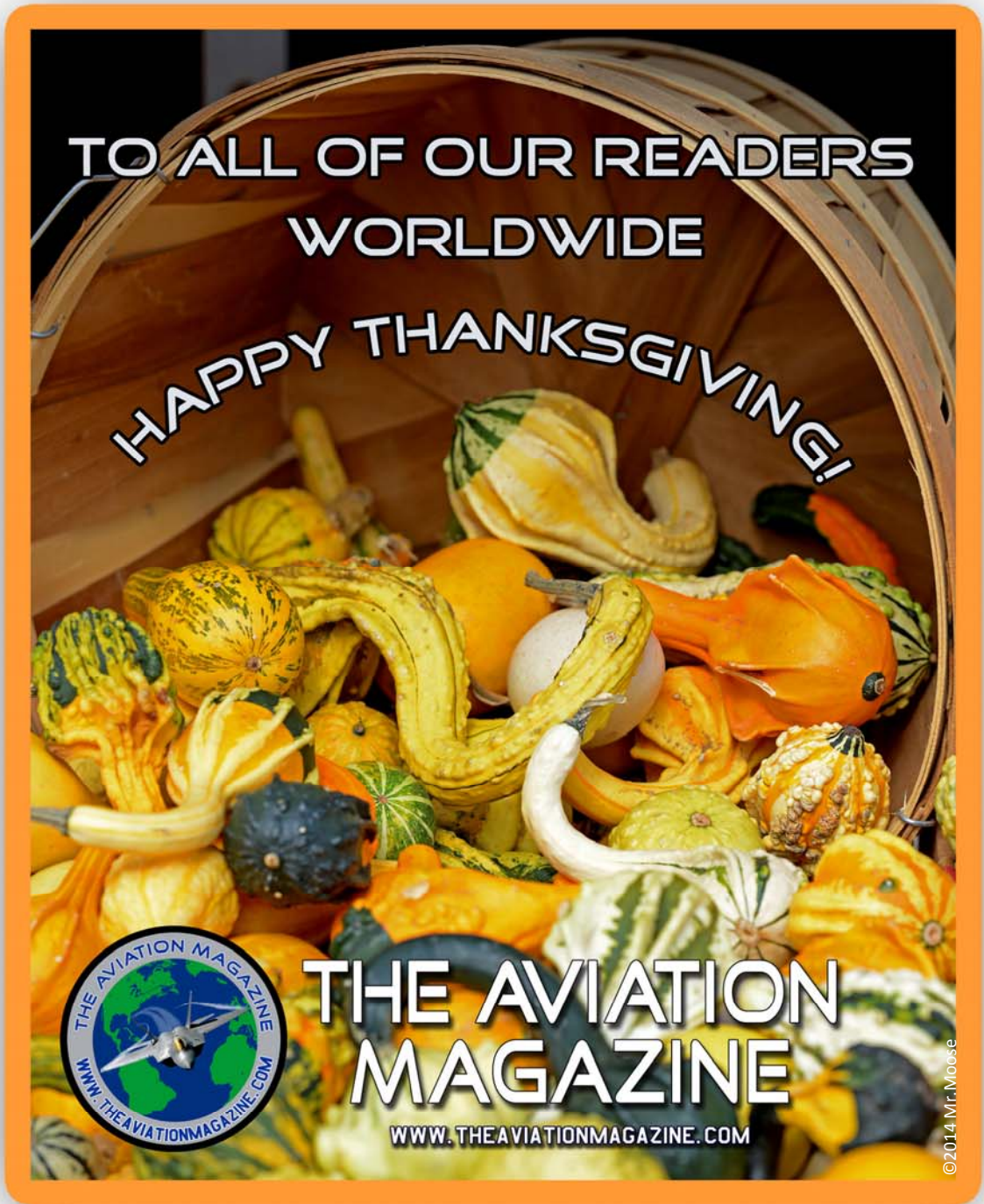
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Philippines B747-400 reg RP-C7471, above.

Royal Netherlands Navy NH-90 at Malta Grand Harbour, below.



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