



#### Get the latest updates on the 2014 Open House

For sponsorship opportunities and to purchase special seatings for the Corporate Chalets, Flight Line Club, Beer Garden, and Box Seats:

www.ThunderandLightningOverArizona.com

www.facebook.com/355FSSMarketing

**DMAFB Public Affairs Open House Websites:** 

www.dm.af.mil/library/d-mthunderandlightning.asp







### www.AIRSHOWSREVIEW.com

# The Magazine February - March 2014 Volume 5, Issue 2

### Features

- California International Airshow, Salinas, California
- Floating in the air: Flying in the iconic Stearman Biplane
- The Great War Flying Museum, Brampton, Ontario
- MAKS 2013 Moscow, Russia
- AXALP 2013, Switzerland
- Ramstein Rover 2013 Exercise, Czech Republic
- NATO DAYS 2013, Ostrava, Czech Republic
- Buck Roetman at Wings Over North Georgia Air Show
- WITH 1-14, MCAS Yuma, Artzona
- California Capital Airshow, Sacramento, California
- Mountain Roundup at Mountain Home AFB, Idaho
- Wings Over Houston Airshow, Texas
- CRUZEX 2013, Brazil
- 106 Posteards from France
- The Best Air Show Award 2013 120

#### Editoriale

- 2 Staff & Contact Info
- 3 Behind the Lens

Cover: Buck Roetman, Pitts S-2S, photo by Stefan Seville Index page: Su-35 at MAKS 2013, photo by Yoshiaki Wakana







Top Laptops,
Tablets and Desktops





The BEST cameras and lenses!





Click on ad to shop amazon.COM

Help to keep The Magazine FREE



Publisher: ASR Media LLC.

**Advertising:** Please contact us at info@airshowsreview.com

#### **Contributing photographers:**

Canada: Steve "Hornet" Bigg

**USA:** Ricardo von Puttkammer, Dan Adams, Stefan Seville, Norman Graf,

Aaron Rumfallo

Europe: Peter Thivessen, Wolfgang Jarisch, Ray Pace,

Far-East: Takeshi Shinoda, Yoshiaki Wakana

**The Magazine** is published 6 times a year and it is available for a **FREE** download from our website www.AirShowsReview.com. Please note we do not accept any unsolicited articles or images for publication.

Printable copies in Acrobat .pdf format are available at \$9.99 per issue s/h included for North America. Yearly editions of six issues at \$19.99 s/h included for North America.



Copyright 2013 ASR Media LLC. The Magazine may not be edited, or sold without prior written consent. However, you are free to distribute it for no charge, as long as it is back linked to our site. All trade names, trademarks, manufacturer names, photographic images and textual works used in this publication, are the property of their respective owners. While ASR Media LLC., strives for factual reporting of events ASR Media LLC., is not responsible for the accuracy of the content or for the opinions expressed by authors of their respective articles and reports.





#### From the Editor: Behind the lens and to the point...

Welcome to our environmentally friendly February – March 2014 issue of *The Magazine*.

We are very optimistic that the 2014 North American air show season will be better than it was in 2013. It has to be, as the Blue Angels and the Thunderbirds will be flying, although both teams have cut back on the number of air show they will participate in. In fact March will be very busy for both teams, you can download the 2014 Military Team Schedules just by clicking on the image below which includes the Canadian Snowbirds as well.

In this issue we gave out our annual BEST AIR SHOW AWARD based upon all the air shows worldwide we attended. ASR Media LLC has attended over 54 events worldwide in the 2013 air show season. To judge which event was the BEST for 2013 from the air shows we attended was even harder than previous years.

Additionally, we are featuring images for the first time from MAKS 2013 in Moscow, which is an interesting event to attend, but be prepared to pay through the nose, and from Switzerland the AXALP 2013 life-fire exercise in the Alps, that anyone can attend, however, it is far from inexpensive to get there. Several air show and military exercises as well that only accredited media can attend; Ramstein Rover from Europe, WTI 1-14 Yuma, and Mountain Roundup from North America, and CRUZEX Flight 2013 from South America. We received some wonderful images from our friends at Ramex Delta, of the Armée de l'Air, for this issue and we will have additional great air-2-air images of them in our April-May issue.

For the 2014 season we will continue to bring our readers an excellent variety of aviation events from air shows to military exercises, that makes *The Magazine* very unique, especially when it comes to, E-based publication!









The 33rd annual California International Air Show took place September 21-22, 2013 in Salinas, California. Although diminished from years past, the air show provided a little bit of something for almost all attendees; except, of course, for fans of current military hardware. This show has always been able to attract a good number and large variety of military aircraft, including the headline jet demonstration teams. However, because of the Congressional budget cuts known as sequestration, military aircraft were almost completely missing this year. Luckily our allies to the north were able to send three aircraft currently serving in the Royal Canadian Air Force. Jet noise was provided by the Patriots Jet Team and aerial demonstrations by two jet warbirds. Three premiere acts provided lots of aerobatic action and Robosaurus and Metal Mulisha provided entertainment for the transformer and motorcycle enthusiasts.

The weather on Saturday was unfortunately overcast with light rain at times, which grounded a number of acts. Sunday made up for it with crystal clear skies, light breezes and temperatures in the high 60's. The opening ceremonies featured a flag jump by Melissa and Rex Pemberton bringing in the national flags of the USA and Canada. John Collver started the aerobatic flying of the day in his beautifully choreographed display of the graceful handling characteristics of the North American AT-6 Texan. Painted in the markings of a trainer based at MCAS El Toro, "War Dog" is flown in a tribute to honor the men and women serving today and in the past. He was followed by Greg Colyer flying another warbird trainer. "Wired" flies a similarly graceful routine, but at much higher speeds, in his Lockheed T-33 Shooting Star. Whether down on the deck, looping high in the sky, performing the dirty pass or speeding past in the photo pass, Greg puts "Ace Maker" through its paces, showing off the fighter heritage of this Korean War vintage plane.

Then it was time for Sean D. Tucker to take to the skies in his Oracle Challenger III biplane. Brilliantly narrated by Brian Norris, his routine has to be seen to be believed. Sean has received all of the industry's highest honors and was named as one of the Living Legends of Flight. A native of Salinas, he clearly enjoys performing for the hometown crowd. Sunday's performance began with an opening series of snap-rolls on the vertical downline and finished with his signature triple-ribbon cut. Robert Howell brought us back to the Jet Age with a very spirited demonstration in the MiG-17. This swept-wing fighter from the late 50's was the first Soviet fighter to feature an afterburner. The bright red aircraft stood out clearly against the blue skies on Sunday afternoon, but the grey skies of Saturday highlighted the incredibly long afterburner flames. It was a real treat to see this aircraft back in the air and on the air show circuit after a very long hiatus. The Pembertons then performed again: Rex jumping in his wingsuit while Melissa circled him in her Zivko Edge 540. After Rex deployed his parachute and landed, Melissa put on a terrific display of the characteristics which made the Edge 540 the most common aircraft used in the Red Bull Air Race World. Appearing for the first time at Salinas, she amazed the crowds with her precision maneuvers which included an inverted ribbon cut. A break in the flying action was then provided by Robosaurus, a real-life transformer. This 30-ton fire-breathing mechanical monstrosity had earlier in the day put on a teaser performance along with the motorcycle demonstration team Metal Mulisha, but it now put on its full show culminating in the crushing and burning of a car. For some it is an opportunity to rush forward to catch all of the action, for others it is the time to grab a beer or something to eat.

The flying resumed with Michael Goulian in the Extra 330SC. This aerobatic powerhouse differs from his previous aircraft, the Extra 300, primarily in the wing design, giving him an increased roll rate of 420 degrees per second. This can lead to "wing blur" in photos of Michael during his snap rolls and tumbles. His fast, aggressive style of flying clearly awed the crowds.

The headline act this year was the Patriots Jet Team. Featuring ex-members of the Thunderbirds, Blue Angels and Snowbirds, the Patriots bring the same level of skill and precision to their presentation as those military jet demonstration teams. Flying high-performance L-39 jets, this premiere civilian-owned aerobatic jet team put on an incredible show. Their red, white and blue smoke system left colorful trails in the sky, tracing out the course of their maneuvers and adding an additional dimension to their performance.

There were far fewer aircraft on static display this year, due primarily to the absence of active US military participants. However, the RCAF came through with three trainers; the CT-142 Dash-8 of 402 "City of Winnipeg" Squadron from Winnipeg, the CT-156 Harvard II of the NATO Flying Training in Canada (NFTC) 15 Wing from Moose Jaw, and the CT-155 Hawk of NFTC 4 Wing from Cold Lake. It was a real pleasure to see these aircraft and talk with the crews. A number of warbirds were also on hand, including a Douglas C-47 and DC-4 to mark the 65th anniversary of the Berlin Airlift. A beautiful Shorts Tucano and a recently restored Lockheed PV-2 Harpoon were among the highlights.

Parking and security at the gates were handled very efficiently by the scores of highly motivated and eager volunteers. In fact, nearly 2000 volunteers are involved in all aspects of the air show. There are numerous food booths and beer gardens set up on the grounds, along with a dedicated Kid's Zone. Space to set up chairs along the flightline is limited but 10,000 chairs, vast arrays of bleachers and various box seats and chalets are available for additional fees. The air show box layout makes photography somewhat difficult, as the aircraft are backlit for a good part of the day, but the action takes place fairly close to the stands. Danny "Sky Talker" Clisham was back as narrator. "Mister Hollywood" paired up with long-time announcer Jim Vanderzwaan to keep the spectators informed and entertained. Air Boss Willie Turner kept the acts moving and the performers on schedule.

More than just an air show, this is one of the premier fundraising events in the area, having contributed more than \$8 million to a wide variety of local charities since 1983, and having an effect lasting well beyond the last echoes of the jets off the Gabilan Mountains. This community charity program has been so successful that it is known as "The Salinas Plan." The ICAS Academy even sends event organizers from around the world to Salinas as part of their educational awareness program. The absence of any active US military participation this year was clearly noticeable. Both the performer list and the static line up was less than in years past, but the execution of the air show itself was, as always, first-class.

ASR Media LLC, would like to thank the organizers, staff and all the volunteers for putting on such a great show.



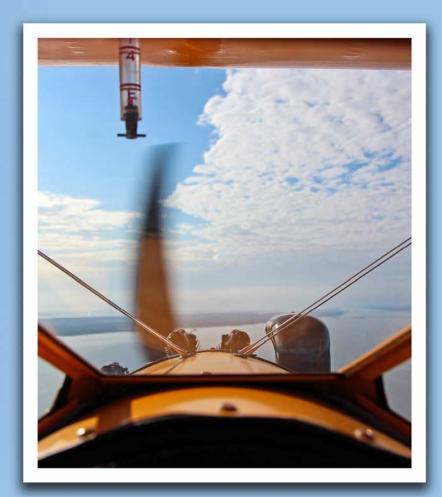




adjectives that air show spectators have come to expect from the Shows they attend. Although 2013 has been a disappointing year across the board due to budget cuts in the United States, it is also a blessing in disguise. The lack of military participation in air shows this year has given spectators a chance to focus on the many exceptional and beautiful privately owned warbirds that are flying across the country. One of those aircraft, while the antithesis of some of the adjectives mentioned before, is really what flying and aviation are all about. That aircraft is the Boeing-Stearman Model 75. I had the pleasure of flying in a stunning Stearman owned by Robert Varney at the 2013 TICO Warbird Air Show in March.

Air Forces (PT-17), the US Navy (N2S) and the Royal Canadian Air Force (Kaydet) the Stearman trained tens of thousands of aviators before and during World War Two. The US Navy variant was known, unofficially of course, as the "Yellow Peril" because of its bright yellow paint scheme and the trials and tribulations of the cadets who flew her. Amazingly, the type remained in service with the US Navy until the last N3N-3 variant was retired by the US Naval Academy in 1961. After WW2, thousands of surplus Stearmans found their way into civilian hands for multiple roles. In all, almost 10,000 Stearmans were built and to this day, they are well represented on the air show circuit and among warbird owners in general.





Mr. Varney's Stearman is a meticulous N2S-3 variant, one of about 1,875 delivered to the US Navy. He was kind enough to take me for a flight just before the air show action started, and we had the skies around Titusville, FL (just a few miles west of Kennedy Space Center) to ourselves. With even just a cursory look at the aircraft, the care and attention to detail on the aircraft is abundantly evident. Closer examination of the plane, from the map box to the engine to the cockpit, reveals just how perfect an example Mr. Varney's N2S-3 is.

As I climbed into the front cockpit (as a trainer, the Stearman is designed to be flown from the front or the back), I felt the history around me. It is awe inspiring to think that this was the very place from which thousands of aviators, including some of the greatest and bravest of all time, had their first taste of flying. After strapping on a parachute and being secured to the seat, we began to taxi to the runway. While many may consider flying in an open cockpit to be cause for

alarm, nothing could be further from the truth. It is a very freeing and serene experience. At times, the flight seemed so smooth that I felt that I could just unstrap from the seat and go for a walk on the wings. I resisted

the urge, but this may be why the Stearman is so popular among wing walkers. We lucked out and the day of our flight was perfect flying weather - just a few wisps of clouds, perfect temperature, little wind and bright sun. The flight was the perfect mix of almost Zen-like relaxation with the exhilaration of flying through the air. Reluctantly we landed, but Mr. Varney and his Stearman flew during the air show so there were ample opportunities to see them throughout the day.

For a pure contemplative appreciation of what aviation truly means, it's hard to beat a flight in a Stearman. With the right aircraft, great pilot and perfect weather, it is an experience that is hard to beat and this flight was one I will always remember. I want to extend a special heartfelt thanks to Robert Varney for going out of his way to take me up in his beautiful aircraft.



Page 14

Page 15









Although military aviation was in its fledgling years at the beginning of World War I, many stories of the pilots and the aircraft of the Great War are the stuff aviation legends are made of. With the Wright brothers' historic first flight taking place just 11 years before the war broke out, it's incredible to imagine that more than 200,000 airplanes had been produced to fight in the war. As the 100th anniversary of WWI approaches, very few of the original 85,000 aircraft that survived the war are still in existence and only a rare handful are in airworthy condition. But that doesn't stop the volunteers of the Great War Flying Museum (GWFM) located near Toronto in Canada from celebrating the aviation history of WWI in the skies of Southern Ontario and it's neighbouring American states.

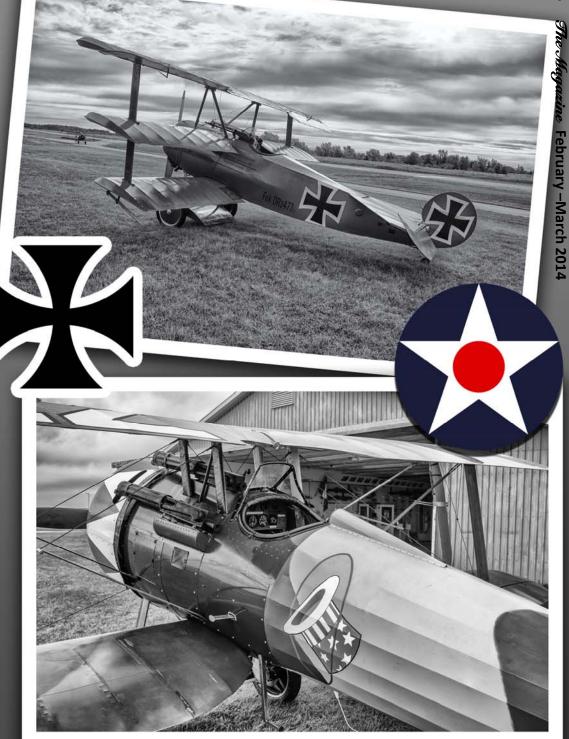
The GWFM was founded in 1970 at the Brampton airport roughly 30 minutes nothwest of Toronto. The museum has 6 replica WWI aircraft that are fully airworthy and 3 more that are under construction or repair. The museum exists to honour the brave pilots who served in WWI as pioneers of military aviation and to showcase their aircraft in the skies above air shows and other events. The museum's aerial displays allow spectators to imagine they've been transported back in time to the French countryside during WWI. Aircraft climb, turn and dive amongst each other overhead in a mock air battle. The sight of the aircraft chasing each other and the sounds of their engines as they strain to gain an edge in the fight give young and old alike a glimpse of the heroism of the pilots of the Great War.

Some of the museum's aircraft are full size replicas while others are slightly scaled down versions of the original. The aircraft were constructed with the goal of maximizing their historical accuracy while ensuring the materials, techniques and parts used on the aircraft are compatible with modern maintenance procedures and that they will provide maximum longevity of the planes. Above all else, the museum ensures that their replicas are safe to operate under current aviation regulations.

Wandering around and inspecting the museum's aircraft as they rest on the grass in front of the museum's hangar, it's nearly impossible not to feel like you've been transported back in time to a grass airfield on the Western front. When you get up close and study the wood grain of the propellers and struts, the fabric texture of the wings or the cooling fins of a radial engine, the aircraft ooze a nostalgic character you don't find in modern aircraft. Add to that the tiny bug splattered wind-screens, authentic camouflage, open cockpit and vintage machine gun replicas and you can't avoid having a strong sense of appreciation for the bravery of the pilots who flew these aircraft in battle.

Possibly the most recognizable of the aircraft in the museum's fleet is the red Fokker DR.1 tri-plane. The museum has 2 of these distinctive 3 wing aircraft but only one is painted in the all-red scheme of the war's top ace, Manfred von Richthofen, the Red Baron. Richthofen was officially credited with 80 air combat victories during the war until he was shot down while flying a DR.1 in April of 1918. The victory was credited to Canadian pilot Captain Arthur Brown. Captain Brown was flying a Sopwith Camel (similar to the replica Camel presently being built by the GWFM) when he shot down the Red Baron. The museum does have a building that houses period uniforms, machine guns, paintings and other artefacts from the Great War. But it would dearly love to have the relic that was awarded to Captain Brown to celebrate his victory; the seat that was removed from Richthofen's DR.1 after his crash landing. Unfortunately for the museum, the seat was donated to the Royal Canadian Military Institute in 1920 by Captain Brown and they're not giving it up any time soon.

The museum is located next to the Brampton Flying Club (BFC) parking lot at the Brampton Airport. Directions and hours of operation can be found on their website



at www.greatwarflyingmuseum.com. Be sure to note that depending on their particular event schedule, not all aircraft are present at the museum at all times. A great time to visit the museum is during the BFC's open house which is usually held the weekend after the Labour Day holiday at the beginning of September. During the open house the planes are on ground display and also flying, and many other unique displays are setup for the day. The museum is a 100% volunteer organization fuelled by the generous donations of members and aviation enthusiasts interested in seeing the museum not only continue to honour those who fought in the skies of WWI but to expand to include more aircraft in their fleet for all to enjoy.











Vakovley Vak 130 "Mitter











Sukhoi Su-34 "Fullback" flanked by four Su-27 "Flanker-E"

Page 34

Page 35





Kamov Ka-32A civilian version of the Ka-27 "Helix"



Mi-35M "Hind E" above, Technoavia Rysachok below.



Mi-28E "Havoc" attack helicopter above, KA-52 "Hokum-B" below.



Ka-226 "Hodlum" above. Beriev A-50El AWACS, right bottom.









# **WINGS OVER SOUTH TEXAS** MARCH 29-30, 2014

FEATURING THE U.S. NAVY BLUE ANGELS & 13 AVIATION ACTS

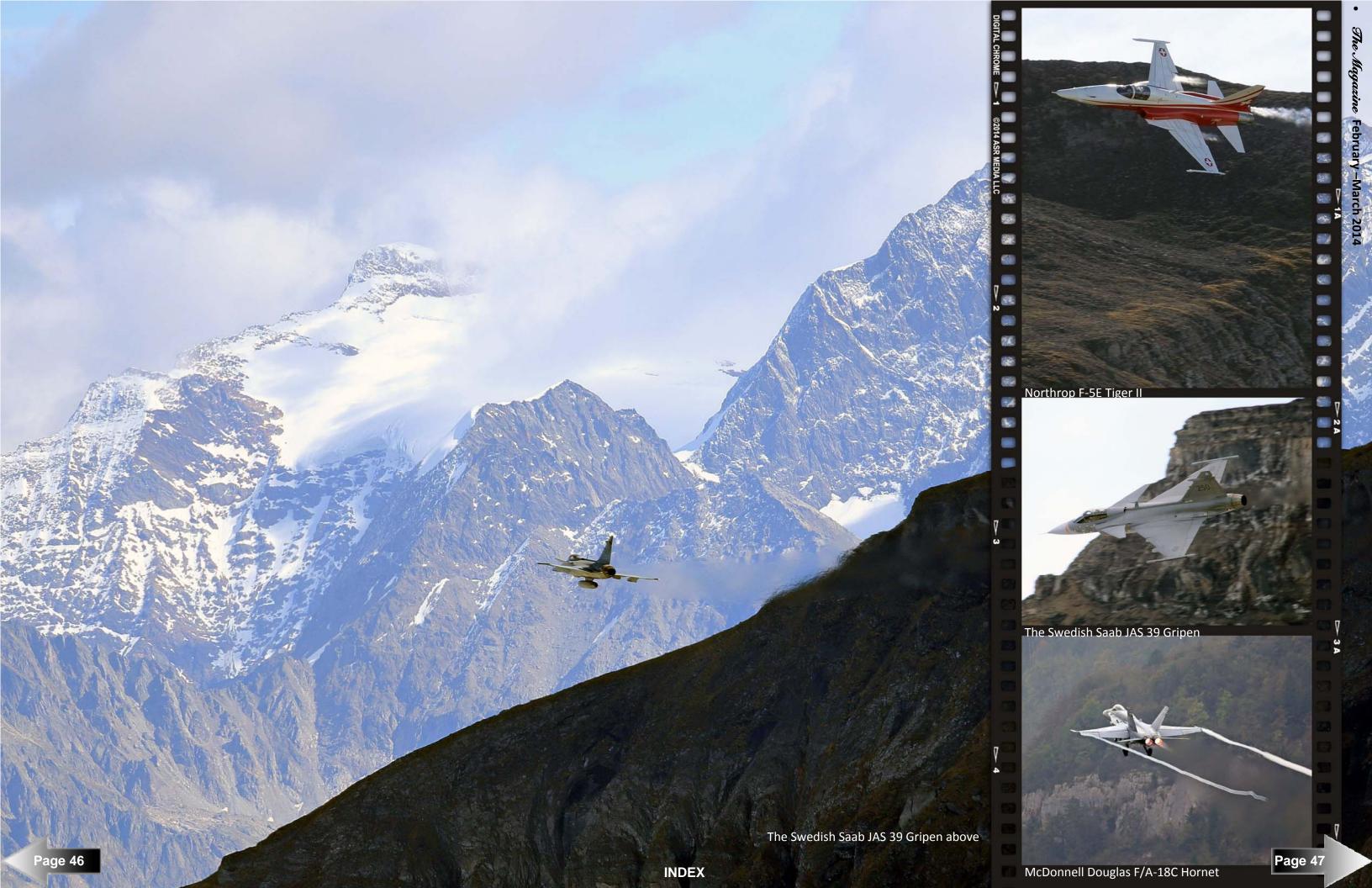
PHOTOGRAPHY BY Y. WAKANA WITH REPORT BY THE ASR TEAM

Every year in the autumn, thousands of aviation enthusiasts climb up to the high peaks of the Swiss Alps (2700 meters above sea level) to watch the Axalp air power demonstration, at the Axalp-Ebenfluh air force firing ange above Brienz, Switzerland. The Axalp is one of the most famous live-fire aviation events in the world.

The Swiss Air Force holds this live fire-event. This is a unique opportunity to see military aircraft in their environment. From the top of the mountain one can see jets, helicopters and prop trainers from the Air Force fly-

INDEX









The synopsis is to provide advanced training opportunity for Close Air Support (CAS) and FAC (Forward Air Controllers). It provides realistic pre-deployment training for forward air controllers to be deployed to NATO's ISAF operation in Afghanistan, or if the need arises anywhere else too.

Upon our arrival the media was taken by bus to the military training area just outside Names nad Oslavou Air Base. We arrived at the same time as the high-ranking officers from NATO HQ, from the Czech Air Force HQ and from the Czech Armed Force Fwho were there to observe the exercise.

The scenario was that the NATO troops were attacked by the insurgents (Taliban in this case) and they had to call in air support. The support was provided by the Mil Mi-24V "Hind" from the Czech AF and the air defense system consisted of Bofors RBS 70 to cover the airspace. Practice ammunition was used with some live explosives, it was recommended to protect our ears, as it was quite loud. We were only there for a partial part of the day. After boarding the bus time we returned to the Air Base and were driven directly to the ramp from which most of the aircraft participating RARO13 operated from. There were additional aircraft that operated from different airfields: three Mil Mi-24V "Hinds" from Libava, Czech Republic, four Aero L-159A "Alca" from Caslav and the two Saab JAS-39C "Gripen" from Hungary from their home base in Kecskemét. The journalists received a warm welcome from NATO HQ AIRCOM represented by Colonel Harry H. Schnell (German Air Force) the Exercise Director and Brigadier General Hakan Evrim (Turkish Air Force) and Chief of the General Staff Lieutenant General Petr Pavel (Armed Forces of Czech Republic).

We arrived on the ramp right in time to see to the Slovenian PC-9M's "Hudournik" armed with bombs. We could watch this procedure from a safe distance. It's not often one sees aircraft being armed with real ammunition. We got also some rare views of the L-39's and Alca's with different type of ordnance such as rocket and gun pods.

The missions during the day were mostly flown by the Czech L-159 Alca's and L-39 Albatros, the Slovak L-39 Albatros and the Slovenian PC-9M's. The German PC-9B's (from E.I.S. Aircraft) and the Learjet 35A (from GFD = Gesellschaft für Flugzieldarstellung) were busy on the day too. During our stay we had many options including to stay on the ramp, next to the taxiway and runway, and even go up to the tower which offered an interesting point of view. Due to the inclement weather on the day of our visit many operations were cancelled. As a result the Turkish F-16's and the Polish Su-22's cancelled their missions. In the late evening the weather cleared, and the Turkish Air Force F-16's visiting from 161 Filo based in Bandirma, Turkey, flew several missions in the last light of the day.





Over all it was a great experience to spend a day at this kind of exercise. We saw the highly trained troops, FAC's working together with officers, skilled ground crews and aircrews from different nations in a realistic scenario based upon current situations that could happen at anytime, anywhere.

NATO Exercise Facts

Codename: Ramstein Rover 2013

Category; Non-Article 5

Level: 1, Current Operations – Deployed

Form: LIVEX (Live Exercise)
Type: AIREX (Air Exercise)

Exercise Director: Colonel Harry H. Schnell (German Air Force / HQ AIRCOM)

Co Exercise Director: Colonel Zdenek Bauer (Czech Air Force)

Commander 22nd Air Base: Colonel Jiri Vavra

RARO 2013 Flying Assets

- 3 x Sukhoi Su-22 (Polish Air Force)
- 5 x F-16 (Turkish Air Force)
- 2 x Saab JAS-39 Gripen (Hungarian Air Force)
- 3 x Mil Mi-24V Hind (Czech Air Force)

RARO 2013 Flying Assets (continued from previous page)

- 2 x Areo L-39 Albatros (Czech Air Force)
- 2 x Mil Mi-171 (Czech Air Force)
- 4 x Aero L-159A Alca (Czech Air Force)
- 2 x Aero L-39 Albatros (Slovak Air Force)
- 2 x Mil Mi-17 (Slovak Air Force)
- 2 x PC-9M (Slovenian Air Force)
- 1 x Learjet 35A (Germany Civilian Operator)
- 2 x PC-9B (Germany Civilian Operator)

Ramstein Rover 2013 After Action Facts

39 FAC teams from 18 nations, in total 186 FAC (91 FAC trainees + 95 instructor and support staff). NATO aircrew flew 426 sorties. NATO Forward Air controllers executed a total of 1050 control runs

Exercise director Colonell Harry H. Schnell said "that the RARO 2013 was most successful again."

ASR Media would like to thank Maj. Jolana Fedorkova from the Czech Air Force Headquarters for the invitation, Maj. Sabina Introvicova, Czech Air Force Headqurters and Manfred Reudenbach from HQ AIRCOM Ramstein Air Base, Germany for their cooperation and the hospitality on base.



-39ZA Czech Air Force with gun pod and rocket pods

EIN ROVER



This year's event of the NATO Days in Ostrava had the smallest number of participating aircarft since its founding. This was a direct result of budget cuts by many member countries, the sequestration of the United States Air Force and due to the work schedule for NATO for 2013. Despite these facts, the organizers of the NATO-Days 2013 managed to pull it off. As usual it was the largest display in Central Europe of NATO armed forces. This year's focus was more on the ground displays than perhaps other years for reasons already noted. Several demonstrations of combat and rescue equipment, fire brigades, the Czech Border Guard unit and as well special army units from NATO countries were featured.

Page 54

Page 55



The flying display matched the small static group of aircraft on the ground. Nevertheless, there were some highlights in the sky over Ostrava for the audience. One was the giant Antonov An-124-100 "Ruslan" transporter from Volga Dnepr Airlines. They demonstrated cargo loading in the static display area. The "Rulan" is the worldwide workhorse for the NATO. No other aircraft (with the exception of the Antonov An-225) can carry more tonnes and bulky goods. Another highlight was the the Swedish Air Force Historic flight with two aircraft: the 50 year old Saab Sk 60A, and the legendary Saab AJS 37 Viggen (Thunderbolt).

There were two fantastic display teams at the Leoš Janáček Ostrava Airport. The Turkish Air Force display team "Turkish Stars" and the rarely seen Spanish Air Force helicopter display team Patrulla ASPA with their Eurocopter EC-120 "Colibris" with a very dynamic presentation. They used lots of smoke and flares in their formation and they performed spectacular crossovers.

The flying display started with the Austrian Air Force Eurofighter Typhoon, followed by a flying display of the Czech Air Force's Aero L-159 Alca from the 212th Tactical Squadron. Some of the displays were similar to the air show in Sliac, Slovakia, in which Czech and Slovak Republics, celebrated their 20th anniversary.

An unusual display was the demonstration of in flight refueling of two Czech Gripen's from a Swedish Air Force KC-130H "Hercules". The well known F-16 Solo Display Team from the Royal Netherlands Air Force's orange F-16MLU performed well. The F-16 display was accompanied by a lot of flares, which the audience loved in Ostrava. The Centre of Aviation Training from Pardubice, had a nice fly-by with 3 x Zlin Z-142, 1 x Let L-410 and 2 x Aero L-39 Albatros. Another participant was the Slovenian Air Force's Pilatus PC-9M "Hudournik". The Slovenian Air Force brought their aircraft directly from the Ramstein Rover 2013 exercise to Ostrava. Apart from the Swedish Air Force Historic Flight, there were other civilians in the flying display. A wonderfully restored Bell AH-1S "Cobra" operated by Heli Czech debuted at the NATO-Days. The Cobra wore the old camouflage of the United States Army used in the Vietnam War. A medical emergency demonstration was performed by a Eurocopter EC-135T2 which is in service in the Moravian-Silesian Region. It was certainly a helicopter lovers event. Immediately after the Cobra and the Spanish Air Force helicopter display team Patrulla ASPA the Belgian Air Force's Agusta A-109 took to the sky with a lot of flares. Followed by a hostage scenario with a Mil MI-171S dropping off troops and an assault of an Mil Mi-35V "Hind". Both

helicopters were from the Czech Air Force. The flying display ended with paratroopers jumping from a Mil Mi-171S.

Over all it was a good show with the focus for this year definitely on the ground displays. ASR would like to thank Ms.Tereza Šlosarová from Crestcom for her assistance and hospitality.





Saab Sk60A (Saab 105) above.



Saab AJS 37 Viggen above above and center image.









Let L-410UVP and a Aero L-39C from the Centre of aviation Training in Pardubice, Czech Republic.







### REACH A GLOBAL AUDIENCE

just like we do at The Magazine



Over **260,000** readers in over 124 countries have downloaded\*

## The Magazine

It makes a **world** of sense to advertise in *The Magazine* Partner with us to reach our

growing readership globally!

To place your advertisement at very competitive rates contact us: INFO@AIRSHOWSREVIEW.COM



ASR Media LLC 130 Madison Ave. 2nd Floor, New York, NY 10016
\*Source: Google and 1&1 Site Analytics dated 06/30/2013







**B**uck Roetman is a pilot's pilot - he has amassed over 13,000 flight hours at the controls of more than one hundred types of aircraft, from Piper Cubs to corporate jets. Currently his bread is buttered by flying a bright yellow Pitts S-2S in air shows around the US. This year's Wings Over North Georgia air show - a short hop from his Sharpsburg, Georgia home - featured him alongside the likes of John Klatt, Gary Ward, and the Black Diamond Jet Team.

The media day for the Wings Over North Georgia air show started out peacefully, and as I walked around I came across a Piper Cherokee 6 - with the back doors and seats removed. This was the jump platform for the Lucas Oil Parachute team, led by Nick Halseth. I found Nick across the ramp shooting video for Mike Wiskus, the pilot of the Lucas Oil Air shows Pitts. While he gave an aerobatic flight to an essay contest winner, Nick and I discussed the possibility of doing some air-to-air shooting from the Cherokee. Because of time constraints with the performer briefing and start of the practice show, we decided to meet back up at the Cherokee at the conclusion of the show to finalize our plans. As soon as Jim Tobul and Scott Yoak landed their F-4U and P-51 to close practice, I met Nick, Mike and Buck at their aircraft. Mike had a conflict in his schedule, but Buck was nearby and was easily convinced to model his Pitts S-2S for us in the brilliant evening sunlight.

After filling up on fuel and smoke oil, we taxied out and departed along runway 19 at the Richard B. Russell airport. In formation the entire time, we began a slow right hand turn to the west, and the setting sun lit up the matching yellow MT Propellor bolted to the nose of the Pitts. Buck danced the airplane around on its side and upside down, allowing Nick and me to shoot continuously from the rear of the Piper where we were harnessed. We flew west to the Selman Lakes, and made a long, slow 180 degree turn to the left to make our way back to the airfield. Still shooting on the way back was limited due to the now backlit conditions, but it enabled some stellar video to be captured as Buck barrel-rolled his plane around us repeatedly.

I want to thank Buck Roetman and the entire Lucas Oil team (Mike Wiskus, Nick Halseth, Dani Uttecht, and Ryan Albrecht) for their help and cooperation in enabling me to accompany them on this flight.







After World War Two the Marine Corps formed Special Weapons Training Units. As their size and mission grew through the years, they were redesignated Marine Air Weapons Training Units, one in Cherry Point, North Carolina on the East Coast and the other in El Toro, California on the West Coast. In 1978 these two units were consolidated into one unit at Marine Corps Air Station Yuma in Arizona: Marine Aviation & Tactics 1 (MAWTS-1). MAWTS-1 provides standardized advanced tactical training and certification of unit instructor qualifications that supports Marine aviation training and readiness. Since 1978 MAWTS-1 has conducted two Weapons and Tactical Instructor (WTI) courses per year, with more than 300 graduates a year. Only the top ten percent of Marines attend WTI.

Marine Light Attack Helicopter Squadron 169 (HMLA-169) from Camp Pendleton in San Diego, CA is one of the units participating in WTI 1-14. On October 8th their mission was to support ground troops over the Chocolate Mountains Aerial Gunnery Range in California with a 3-ship UH-1Y Venom

The Venom is the latest version of the venerable UH-1 Huey. UH-1Ys are newly manufactured airframes with composite 4-blade main and tail rotors powered by twin General Electric T700-401C engines with IR suppression, glass cockpit, 125% higher payload and 50% more range than its predecessor UH-1N.

Mission briefing was held at 1200 hours in the UH-1 Division room inside the MAWTS-1 building. At the briefing pilots and crewmembers learned the details of the mission. At 1400 hours all 3 helicopters took off on their way to Chocolate Mountains where they engaged "enemy" troops and assets on the ground with rockets and rapid fire from GAU-17 mini-gun on the starboard side and GAU-21 (.50 Cal) machine gun on the port side. All three helicopters flew very close to the mountains and performed aggressive offensive maneuvers to achieve the goal of eradicating threats on the ground. About half way through the mission, we landed at a FARP (Forward Arming and Refueling Point) where the helicopters were refueled and new ammunition was loaded. It was also a chance to eat and drink something before taking off again for more action over the aerial gunnery range. The entire time at FARP everyone was aware of possible enemy surprise attack by a Mil Mi-24 Hind, which did not materialize. The mission was about 5 hours long. As we returned to MCAS Yuma the sun was already setting and we landed in the darkness.

The following day, UH-1Ys and AH-1Zs from HMLA-169 participated in a Marine rapid deployment exercise in a mock Middle Eastern town located in the Yuma Proving Grounds.

All of the Marine Corps air assets participate in the 7-week WTI course. ASR Media would like to thank Corporal Zachary Scanlon from the Public Affairs Office and Major Carl A. Bailey for their assistance.













The eighth annual California Capital Airshow took place at Sacramento Mather Airport October 5-6, 2013. Although the weather forecast called for blue skies and calm winds, the Republican shutdown of the U.S. government earlier in the week caused many to wonder whether the air show would take place. MCAS Miramar's Air Show and Open House had been cancelled mere hours before it was to start, and there were fears that a lack of FAA or Air Traffic Control manpower might have the same effect in Sacramento. The continuing effects of the budget sequestration also meant that no U.S. military aircraft would be in attendance. In the end, the show did go on. And what a show it was: three (!) jet demonstration teams, several world-class aerobatic champions, wing walking, warbirds and, yes, even the jet-powered outhouse. Add to that a well-rounded set of aircraft on static and displays from organizations such as the Aerospace Museum of California and Aerojet Rocketdyne's Space and Aviation LaunchPad and you have a weekend of fun and entertainment for all.

The gates opened at 0900. Parking was handled efficiently, and the massive ex-SAC airfield apron provided plenty of close-in, paved parking spaces. Security checks were handled expeditiously at the two entrances and visitors were greeted by a large array of vendor and exhibit booths. Quite a few chalets and VIP tents were set

were set up along the flightline, but there was ample room to put folding chairs along the fence at show left and right. Mather Field's runway layout (4/22) can be challenging for photography early in the day, but by the afternoon when the majority of the flights take place it is not a problem. The action takes place close enough to the flightline that a 300mm lens on a crop-sensor body is sufficient to capture the majority of the action. The air show organizers also provide a variety of different opportunities for the aviation photographer, including access on arrival and practice days, early morning and evening access and preferred shooting locations before and during the air show. On static display, large cargo aircraft from FedEx and UPS, such as Boeing 727, 757 and 767s, took the place of C-5, C-17 and B-52s from the USAF. A large number of warbirds and civil aviation aircraft filled out the display space. There were also quite a few agricultural aircraft, including crop-dusters, on hand, perhaps inspired by the success of the Disney movie "Planes." Another interesting plane on display was a highly modified, all-electric Rutan Long-EZ, which Chip Yates used to set both top speed and time-to-climb records over the weekend.

The flying began promptly at 1100, with the Red Bull Parachute Team bringing in the American and Canadian

**INDEX** 

flags. The Maple Leaf was to honor the presence of the RCAF Snowbirds. John Klatt and Jeff Boerboon started off the day with a nice demonstration of the relative handling characteristics of the ANG MXS and Extra 300 aircraft; John later put on his full high-energy high show in the MXS. The Bremont Horsemen then put on the first of their three demonstrations of the day, performing a beautiful aerial duet in their P-51 Mustangs. Greg Shelton took us back to the barnstorming days with an impressive display in his Super Stearman. He would return later in the day with Ashley Battles wingwalking her way through a similar series of manoeuvres, including barrel rolls and hammerheads with her on the top wing. The Metro Fire UH-1 Huey was the only helicopter to appear in the show, demonstrating a water-drop in front of the crowd. Modern fast-jet action was provided by Mark Peterson in his Alpha Jet, putting on a demonstration of this European trainer / light attack aircraft using a very nice smoke system. The Red Bull Air Force was up next; the parachutists awed the crowd as they performed in their squirrel-suits and ended with an incredible demonstration of swooping. From his signature Cobra manoeuvre on take-off to the final rudder slides before landing Kirby Chambliss in his Edge 540 kept the crowd looking skyward in disbelief.

Sixty five years ago the Western Powers overcame the Soviet blockade of West Berlin by flying food and fuel into the beleaguered city in what was officially known as "Operation Vittles." The air show marked this anniversary with the flight of a C-47 and C-54, workhorses of the airlift. A special tribute honored Colonel Gail Halvorsen. It was he who initiated the dropping of candy and chocolate to the young children of West Berlin, earning him the nickname of "Candy Bomber." In an operation soon known as "Little Vittles," pilots would drop treats tied to handkerchief-sized parachutes from their aircraft while on final approach. Col Halvorsen was at the controls of the Skytrain during the fly-by and upon landing was taken to meet a number of veterans of the airlift as well as a group of German aid recipients who had been children at the time. All the while the Skymaster flew overhead,

provided the perfect narration.

The Patriots Jet Team had originally been scheduled to fly at MCAS Miramar this weekend, but thanks to the work of Darcy Brewer, executive director of the air show,

providing a fitting backdrop to the ceremony, while Lt. Col. Jon "Huggy" Huggins

her dedicated crew, and last-minute sponsors, arrangements were made to have them perform in Sacramento. Staging out of their home base of Byron, the six L-39s put on a beautiful high show, complete with multiple delta and diamond formations, tail-slides and head-on crosses, all accompanied by their red, white and blue smoke systems. Michael Goulian continued the aerobatic flying, putting on a thrilling, hard-driving display in his Extra 330SC. It was now time for the warbirds: an assembly of trainers (Texans and a Trojan), fighters (Mustangs and Sea Furies) and a Mitchell bomber made a half-dozen passes in front of the crowd, spaced so evenly that it was a continuous circuit of prop noise. Dan Vance in "Speedball Alice" and Brian Sanders in his Sea Fury later put on solo demonstrations. An OV-10 had also put on a nice solo warbird demonstration earlier in the day.

A Missing Man formation flown by the Vultures Row AT-6 formation team was followed once again by the Horsemen. The team was scheduled to fly a three-ship demonstration in their F-86s, but a mechanical issue

kept one of the Sabres grounded. Nevertheless, it was thrilling to see the close-spaced aerobatics of the two jets high in the sky, and awesome to see, hear, and feel them speeding by on their high-speed passes. Kyle Franklin, in his brand-new Demon-1 biplane "Dracula," finished up the solo aerobatic flying for the day. He ended his performance with a race against a jet-powered school bus.

The headline act this year was the RCAF demonstration team, the Snowbirds, in one of their few U.S appearances. This year's theme, "The Pursuit of Excellence" marks two exceptional milestones: the 70th anniversary of the founding of 431 Squadron and 50 years of flying the CT-114. The clear skies over Sacramento were soon filled with the smoke trails of the red and white Tutors as they put on an outstanding high show. The nine-ship team puts on a very graceful show, segueing from one formation into another with fluid precision. The "Canada Burst," for instance, starts with the team approaching the audience in the "Canada Goose" formation, transitions to the "Big Arrow" at the top of a loop, morphs into the "Big Diamond" at the bottom of the loop and then bursts into nine different directions on the upward line. New to the formations this year was the "Lancaster," honoring their Bomber Squadron heritage. But there are also plenty of thrills, such as when the opposing solos, or even opposing pairs, cross at high speed at show center. After their demonstration the whole team came over to the autograph booth to sign memorabilia and answer questions from their fans.

Air Boss Ralph Royce and Narrator Ric Peterson did a fantastic job keeping the planes in the air and the audience informed and entertained for almost six hours of flying. ASR Media would like to thank all of the staff and volunteers for putting on such a great show and Karen Strong for arranging the media access.

Greg Shelton & Ashley Battles Super Stearman Wingwalking, center. The Horsemen: F-86s, below.







**M**ore than 300 German Air Force and Royal Canadian Air Force Airmen and nearly 300 visiting U.S. Sailors, Soldiers and Marines spent three weeks in the high desert of Idaho participating in a combined-joint exercise called Mountain Roundup 2013.

This year marks the ninth time Mountain Home AFB has hosted this training exercise which features a broad spectrum of simulated missions. Access to over 7,500 square miles of modern, well-instrumented operational range space allows for realistic training while providing the flexibility to accommodate the complexity of this multinational, multiservice exercise. The exercise is part of the German Air Force (GAF) Tornado Fighter Weapons Instructor Course (FWIC) Mission Employment (ME) Phase and serves as the capstone of a multi-year curriculum. Earlier phases of instruction take place at Holloman AFB, NM, where German aviators typically spend seven months in FWIC training before they participate in Mountain Roundup to finalize their course. Evolving out of previous ME exercises at Nellis AFB, Mountain Roundup combines the best aspects of both Red Flag and Green Flag and features multiple air-to-air and air-to-ground missions such as basic fighter maneuvers, close-air support (CAS), urban combat support, suppression and destruction of enemy air defenses (SEAD/DEAD), and combat search and rescue (CSAR). Per the GAF: "According to its motto "Sola Praecisio Valet" ('Only precision counts') the FWIC trains highly skilled tactical leaders for the operational Tornado squadrons in Germany, who are able to solve unknown and complex problems with innovation and ingenuity, while teaching their peers how to apply the resulting solutions effectively and safely. This is achieved via a building block approach,

This year's exercise was planned to be the largest to-date, with over 100 aircraft scheduled to participate. However, the government shutdown meant that many of the U.S. assets were grounded, including the host wing, the 391st Fighter Squadron (which did, however, conduct

starting with academic surface and aerial attack sorties, pro-

gressing into tactical missions, fighting surface and dissimi-

lar air threats, while employing a wide range of non-

precision, as well as laser guided live weapons."



on the final day of the exercise). The Idaho Air National Guard A-10s, stationed at Gowen Field in Boise, were similarly grounded. F-15C Eagles from the 125th Fighter Wing, Jacksonville Air National Guard Base, FL, which had already arrived to take part in the exercise, were forced to return home without participating and F-16 Fighting Falcons of the 64th Aggressor Squadron from Nellis AFB also did not participate because of the shutdown. This unfortunate circumstance, however, only added to the realism of the exercise, forcing ME planners to reshuffle assets just as they would in a real-life situation. Aircraft originally designated to be members of the Blue Team were reassigned to the Red Team, and missions were adapted to the new realities of the battle-

The exercise focuses on integrating the disparate military forces into a cohesive team capable of conducting both offensive and defensive air and ground operations. Marine and Army elements deployed both day and night in convoys which were either the target of offensive operations or friendly forces which were being defended. Air resources deployed from a number of staging areas and converged over the Saylor Creek or Juniper Butte ranges. The first to take off were the KC-135 Stratotankers from Fairchild AFB, in Spokane, WA, and the KC-130 Hercules of VMGR-234 "Rangers," staging out of Gowen Field in Boise. They were soon followed by the NATO E-3A AWACS which provided the "eyes in the sky" for the exercise. RCAF CF-188 Hornets from 409 Tactical Fighter Squadron and AV-8B Harriers of VMA-542 "Tigers," departed from Gowen Field shortly thereafter. At Mountain Home AFB, ground crews were busy with their final preparations, loading munitions appropriate for the mission at hand.

field.

Soon the taxiways were crowded with a multitude of aircraft: Tornado GR-1s and GR-4s from the German Air Force, and F-15SG Strike Eagles from the Republic of Singapore Air Force, assigned to the 428th Fighter Squadron. Electronic warfare capabilities were provided by EA-18G Growlers from VAQ-136 "The Gauntlets," and "Jamkites," modified Learjet 36As from the Gesellschaft für Flugzieldarstellung (GFD). On the ground, GAF joint terminal attack controllers (JTAC) along with JTACs from the U.S. Marine Corps 1st Air Naval Gunfire Liaison Company (ANGLICO) were embedded with the Army and Marine forces. They quickly established contact with their airborne assets and prepared for the exercise of the day.

The high desert around Mountain Home resembles the landscape of southern and western Afghanistan and the huge expanses of restricted airspace and modern ranges provide a perfect training ground for the multinational forces. Instrumentation on the ranges allows ground threats to be electronically simulated and additional realism is provided by SMU-124E "Smokey Sams". These simulator missiles provide a smoke trail in addition to the electronic signals, giving pilots in the air visual evidence of Surface to Air Missile (SAM) threats. Simulated targets, such as an airfield, an industrial complex, villages and radar, missile, gun and artillery sites allow highly realistic combat scenarios to be played out.

Complex combined-forces exercises are played out day and night for two weeks. It is this ability to stage such large-scale composite air operations (COMAO) that makes Mountain Roundup the perfect capstone exercise for GAF Weapons Instructor Undergraduates (WUGs, pronounced "vooks"). The WUGs demonstrate proficiency as mission commanders by planning and executing five different Mission Employment (ME) tasks, including CSAR, CAS, SEAD/DEAD and SCAR (Strike Coordinated Attack and Reconnaissance). One day was devoted to planning, the next to executing the plan. "A mission commander needs to have a mastery of all of the weapons and delivery systems in the inventory. Each force brings different capabilities and Mountain Roundup, being a multinational Large Force Employment exercise, allows the students to assemble and deploy the best resources for each scenario, effectively integrating the Tornado into the highly complex COMAOs" said Lieutenant Colonel Andreas Berg, GAF Flying Training Center. Upon the successful completion of the course, the WUGs are promoted to Fighter Weapons Instructor Graduates. "The end result of this exercise is a collection of warfighters from multiple nations and branches of services that are significantly more prepared to engage in coalition major combat operations," said U.S. Air Force Major Tapan Sen, 366th Fighter Wing Weapons and Tactics Flight Commander. Despite the disruptions caused by the government shutdown, everyone involved agreed that the mission had been accomplished.

ASR was privileged to spend a whole day on base during Mountain Roundup 2013, watching both the departures and returns of the morning and afternoon missions. It was a great experience seeing ground and aircrews from different countries engaged in such realistic training exercises. Due to schedule shifts in the GAF training programs the next Mountain Roundup will be conducted in the summer of 2015, with participation by the Eurofighter Typhoon and Electronic Combat and Reconnaissance (ECR) Tornados expected.

We look forward to returning for an even bigger and better Mountain Roundup 2015. In the meantime, join us at Mountain Home AFB September 20-21, 2014 for the Gunfighter Skies Airshow!

ASR Media would like to thank 2nd Lt. Rebecca Ennis, Chief of Outreach for the 366th Fighter Wing Public Affairs Office for arranging the media access and providing invaluable support during our visit. We would also like to thank Maj. Tapan Sen, 366th Fighter Wing Weapons and Tactics Flight Commander & LtCol Andreas Berg and Capt Carsten Lippisch, GAF, for providing additional information on the exercise.

#### Participating aircraft included:

GR-4 Tornado, GAF Tactical Fighter Wing 33, Büchel Air Base, Germany
GR-1 Tornado, GAF Flying Training Center, Holloman AFB
Learjet 36A "Jamkite," Gesellschaft für Flugzieldarstellung, Hohn, Germany
NATO E-3A Sentry AWACS, NATO Air Base Geilenkirchen, Germany
CF-188 Hornet, RCAF 409 Tactical Fighter Squadron, CFB Cold Lake, Canada
EA-18G Growler, VAQ-136 "The Gauntlets," NAS Whidbey Island
AV-8B Harrier, VMA-542 "Tigers," MCAS Cherry Point
KC-130 Hercules, VMGR-234 "Rangers," NAS JRB Fort Worth
F-15SG Strike Eagle, 428th Fighter Squadron, Mountain Home AFB, Republic of Singapore Air Force

Tornado GR4 from the GAF





GR-1 Tornado, GAF Flying Training Center, Holloman AFB



F-15SG Strike Eagle, 428th Fighter Squadron, Mountain Home AFB, Republic of Singapore Air Force F-15 Strike Eagles with a Tornado at the Mountain Home AFB





Wings Over Houston Airshow

ARTICLE AND PHOTOGRAPHY BY NORMAN A. GRAF

Page 87

The 29th Annual Wings Over Houston Airshow was held October 26-27, 2013 at Ellington Field in Houston, Texas. Presented by the Commemorative Air Force, the world's largest flying museum, it's no wonder that this air show is dominated by warbirds. The emphasis was on World War II: from the Tora!Tora!Tora! display depicting America's entry into the conflict to the B-29 which dropped the bombs that ended the war. The flying spanned not only the action from the Pacific to Europe, but also featured aircraft from all roles: trainers, liaison, utility, fighters, dive bombers, torpedo bombers, light and heavy bombers. There was also a special flying tribute commemorating the 60th anniversary of the Korean War. The air war in Vietnam was represented with a set of aircraft on static display. With such a large number and variety of warbirds demonstrating America's airpower heritage, plus an exceptional group of aerobatic performers, this was the perfect place to end the 2013 air show season.

Although the weather on Saturday was perfect, Sunday morning began with a severe thunder-storm that had high winds and lightning and which drenched the field with over an inch and a half of rain. The schedule described here for Saturday was of necessity modified for Sunday. The gates opened promptly at 0800. With close-in parking and efficient security and ticketing at the gates, getting to the flightline quickly to secure a spot along the fence was a breeze. Unlike at many shows, all of the aircraft which perform are viewable on static display both before and after flying. It pays to get there early to see all the aircraft on the hot ramp. The RE/MAX Para-

chute jumpers flew in the flag to start the show at 10:30 and returned later in the day with wingsuits. The CAF Red Tail Squadron's RISE ABOVE travelling exhibit was on hand to share the history of the Tuskegee Airmen. (See our article about the Red Tail Mustang in our Oct-Nov2013 issue of The

Magazine) The P-51C Red Tail Mustang flew a very nice aerobatic routine, and three Tuskegee Airmen, Charles McGee, George E. Hardy and Alexander Jefferson, were special guests

of the exhibit. Other aviation and military legends and heroes were on hand at the Autograph Tent sharing their stories and answering questions. A very special missing man formation was flown during this air show. Just days before, the P-51D Mustang "Galveston Gal" from the Lone Star Flight Museum had crashed with the loss of life of both pilot and passenger. Two pairs of Bearcats and Corsairs performed the tribute flight.

The sky suddenly filled with a multitude of Japanese aircraft: dive bombers, torpedo bombers and fighter escorts. Tora!Tora!Tora!: the surprise was complete. Explosions soon rocked the infield and aircraft flew in from all directions. A B-17 flew low over the runway, and a lone American fighter, the P-40 Warhawk, fought valiantly against the attackers. It was, of course, the carefully choreographed re-enactment of the attack on Pearl Harbor. Unfortunately, it soon became a bit too real, as thick, impenetrable clouds of acrid smoke completely obscured the action and caused many to retreat from the fence to seek relief. There was a considerable break in the action as fire trucks and crews put out the grass fires.

The flying resumed with a large number of trainer, liaison, and utility aircraft filling the skies and making numerous passes. This was followed by the Naval Aviation flight, featuring a Wildcat, Tigercat, Corsair, two Bearcats, Helldiver and Avenger. Six aircraft from the Texas Flying Legends museum then put on a very spirited show. The A6M2 attacked the B-25 Mitchell, with both aircraft banking, jinking, climbing and diving.

Finally the Corsair and Warhawk downed the Zero. The two Mustangs put on a nice aerobatic display to end the demonstration. Then it was time for the heavies. Where else in the world can you see the B-25, B-17, B-24 and B-29 bombers all in the air at the same time, making multiple simulated bombing runs with pyrotechnics? One really nice feature of this air show is that the aircraft make passes from the left and the right, giving you views of both sides of the aircraft. One of the highlights of the show for many in the crowd was the beautiful series of "banana" passes by the heavy bombers, "FIFI" in particular.

This year marks the 60th anniversary of the cease-fire which Korean War. That air war marked the transition from probut many of the WWII-era aircraft continued to serve. 29 were joined by a T-33 in a display of early-50's airsee action in Korea, the Soviet-designed MiG-17 figured nam War. Randy Ball put on a very impressive display of including generous application of its famous afterburner.

ended active hostilities in the peller-driven aircraft to jets, The F8F, F4U, P-51, and B-power. Coming too late to prominently in the Vietthe Fresco's capabilities,

It wasn't all warbirds, though; there was also plenty of world-class aerobatic action. Paul Fiala, John Klatt, Michael Goulian, Matt Younkin and Debby Rihn-Harvey (fresh from competing at the

27th World Aerobatic Championship) all put on impressive demonstrations in aircraft as varied as the Great Lakes biplane to the Extra 330SC.

Photographers had the option of purchasing a Sunrise Photo Tour Pass or Photo Pit Pass to gain either early access or elevated risers, tent area, drinking water, and restrooms in a chalet area. The viewing area is west of the 17/35 runway, meaning that the afternoon sun is behind you, making for perfect conditions for photographers. The action, especially taxiing, takes place quite close to the audience; a 300mm lens is sufficient to capture all but the smaller aerobatic planes in detail. Ralph Royce and Rob Reider teamed up once again as Air Boss and Announcer, respectively.

ASR Media would like to thank Scott Tims for organizing the media opportunities and all the staff and volunteers for making Wings Over Houston one of the world's premier warbird air shows. Keep 'em flying!

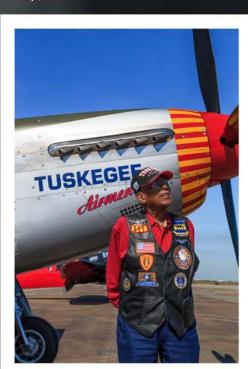


Tora! Tora! Tora!



Curtiss P-40K Warhawk









Air Boss Ralph Royce and Air Show Narrator Rob Reider

Lt. Col. Alexander Jefferson, Tuskegee Airman, with the North American P-51C Mustang "Tuskegee Airmen"



Rick Baker: B-17 Aviator, CAF Gulf Coast Wing, Houston, TX







## CRUZEX Flight 2013

### ARTICLE AND PHOTOGRAPHY BY STEVE BIGG

South America's premier multinational air combat training exercise, CRUZEX, was held in early November of 2013 at the Augusto Severo International Airport located in the north eastern corner of Brazil. Less than 400 miles south of the equator, the airport serves as the civilian international airport for the city of Natal but is also the home of the Brazilian Air Force's Natal Air Force Base (Base Aérea de Natal or BANT). BANT is one of the FAB's largest air bases and its proximity to the equator and the shore of the South Atlantic ocean give it stable and predictable weather for the exercise.

From November 4th to the 15th BANT hosted CRUZEX Flight 2013. Roughly 100 aircraft and over 2000 crew from the host Brazilian Air Force (Forca Aerea Brasileira or FAB) and 7 visiting nations participated in the exercise. The majority of the combat aircraft and crew operated from BANT with additional refuelling, liaison and other aircraft operating from the FAB base at Recife roughly 100 miles south of BANT.

This seventh edition of CRUZEX saw Canada, Chile, Colombia, Ecuador, the United States of America, Uruguay, and Venezuela come together with the FAB to train and exchange their knowledge with each other. While each country had its own specific training objectives, the opportunity to build relationships with the members of other countries forces proves to be a significant benefit of participation in an exercise like CRUZEX. When participant country's forces are called upon in the future to work directly with each other in a time of crisis, the experience of having already worked together can go a long way to help ensure operational success.

All air forces that have the potential of being involved in large force operations (in times of conflict, disaster or humanitarian relief) need to train their leaders to be qualified to lead such operations. CRUZEX is one of only a handful of exercises available to gain this level of training. Coupled with the leadership training, many other training objectives can also be achieved by attending such exercises. Given the general trend amongst

most countries is to be reducing military budgets it would seem that the significant costs of participating in multinational exercises would prevent countries from attending despite the significant benefits of participation. However, if air forces work to align their own general training requirements with the opportunities available through an exercise like CRUZEX they can greatly reduce the cost of participation. In the case of Canada's first participation at the exercise this year with two CC-130J Super Hercules aircraft, along with their support personal and paratroops from their army, the cost of participating in CRUZEX came entirely from planned training budgets and no additional budgeting to participate was required. While many of these training objectives could be met without participating at CRUZEX, the fringe benefits already mentioned with respect to the opportunity to interact with other nations ultimately can prove to provide significant training benefits not available at home without any additional cost.

Morning and afternoon sorties were launched each day of the Exercise and involved a variety of mission types including large force offensive and defensive air ops, close air support of ground troops, combat search and rescue paratrooper drops and many others. Aircraft launching and recovering at BANT each day included Brazil's A-1M attack fighter, F-16 Fighting Falcon's from Chile, USA and Venezuela, squat looking A-29B Dragonfly's from Columbia and Uruguay, Brazilian built A-37B Super Tucano's from the FAB and Ecuador, classic F-5 and Mirage 2000 fighters from Brazil, Canada's new transport workhorse the CC-130J, fearsome AH-2 and H-60 helicopters from the FAB as well as other types used for liaison flights with Recife, the return of paratroopers after jumps and the many other tasks it takes to coordinate an exercise of this size.

Both the Canadian and the Brazilian Hercules aircraft were used throughout the exercise to allow paratroops from Brazil, Canada and the United States the opportunity to jump together doing both free fall and static line jumps. Sergeant Newman of the Canadian Forces Land Advance Warfare Center (CFLAWC) commented that working with the Brazilians has been "really professional" and that they have "some pretty good free fallers down here". As will be the case with all aspects of Canada's participation, the experience gained by the jump masters that were at CRUZEX will benefit many more members of the Canadian Forces than just those who actually participated in the exercise in Brazil. For the roles the paratroops executed during the exercise Sergeant Newman will be preparing an after action report that documents lessons learnt and experience that was gained during the exercise. The report will be reviewed by others at the CFLAWC to ensure lessons learnt in Brazil can benefit others in the same roles by integrating this information into the training all paratroops receive.

Many of the South American air forces look to adopt NATO procedures for aspects of their operations that have a high potential to involve working with NATO member countries such as air to air refuelling, special





### 2014 CALENDARS ON SALE NOW!

PHOTOGRAPHY BY: STEVE BIGG

#### LIMITED TIME PREMIUM 2014 WALL CALENDAR SALE













SEE WHAT'S INSIDE EACH CALENDAR AT:
WWW.LOCKEDONPHOTOGRAPHY.COM

forces or search and rescue missions. These countries look at the forces of the U.S.A. and Canada as examples of the level of capability they are striving to achieve. CRUZEX is planned in advance to build aircraft sorties into the exercise to offer these air forces the maximum opportunity to train together with NATO member countries and exchange their procedures and experience. In return, Canada and the U.S.A. can benefit from the fact that most South and Central American air forces are constantly engaged in real world combat operations. Daily they are fight what they refer to as Narco-Terrorism as they engage the very well equipped narcotics cartels. Even while CRUZEX was running in Brazil, the Venezuelan Air Force continued its fight against drugs by shooting down its 13th aircraft of 2013 in the south west portion of their country near the Colombian border. All of the Latin American participants at CRUZEX have ongoing operations fighting Narco-Terrorism and sharing their considerable real world combat experience is certainly a plus for everyone.

A media day was held on November 5th of the exercise. The morning was filled with media registrations and a press conference with the detachment commanders from each country. In the afternoon select media, including ASR Media, were able to participate in the CRUZEX media flight. 5 fighters flew in formation behind a Brazilian C-130 Hercules with its cargo ramp open to allow media to take pictures of them in flight. Media flight aircraft included an A-1M, a Mirage 2000, an F-5 and two F-16's, one from Chile and the other from Venezuela featuring a colourfully painted tail to celebrate their 30th anniversary of flying the F-16. The FAB put a lot of effort into their social media presence and the shots that came from the media flight are some of the best shots taken during the exercise driving their Flicker gallery to over 114,000 views in a single day.

The local public were invited to get up close to the CRUZEX aircraft on Saturday the 9th. BANT opened its gates for an open house day and aircraft were on display so for the public to get up close. Aircraft were displayed both directly on the ramp with stanchions around them as well as lined up on the flight line behind a short crowd control fence giving people ample opportunity to check out the CRUZEX aircraft. The Canadian CC-130J crew were busy all day as they had an aircraft open for tours during the day. The majority of the participating squadrons set up booths to sell squadron kit and there were many vendors selling different CRUZEX branded items including shirts and hats. Several aircraft flew simply flybys during the day and the Brazilian H-60 helicopter flew a search and rescue demo. Far from an air show but the flights were of course a hit with the crowds and considerably better than no flights at all.

As winding down from CRUZEX Flight 2013 began you can bet planning for the next CRUZEX was ramping up. 2015 should prove to be a very interesting again if CRUZEX organizers are able to continue to attract such a large and varied group of participants and ASR Media looks forward to being there again to cover the next CRUZEX.

ASR Media and Locked On Photography would like to express our thanks to the FAB and Lt. Humberto of the BANT Center for Media and Visitors for providing accreditation to cover CRUZEX and arranging the media flight and access to the ramp and field to shoot the exercise. We'd also like to thank the RCAF, LtCol Goulden, RCAF Detachment Commander for CRUZEX and Capt. Daniel, 8 Wing Public Affairs Officer, for providing the opportunity to shoot on both the media flight and an RCAF paratroops drop flight during the exercise and for their assistance in preparing this article on CRUZEX for The Magazine by ASR Media LLC.











Page 94 INDEX

















# Meeting Aérien Cognac 2013 ©2013 Hervé Cariou





Meeting Aérien Cognac 2013
RAMEX DELTA by ©Hervé Cariou







### THE BEST AIR SHOW OF 2013



2013 was a rough year for all who organize air shows. If the tough economic situation worldwide wasn't enough the imposed sequestration by the US Government on the Military performers made it so much worse. As a direct result many air shows, especially at military bases in the USA, were cancelled, and several civilian air shows decided to cancel their events too. For those organizations which did put on an air show it was a real scramble to find other civilian attractions for their audience and despite their efforts attendance was down by 20% or more. This was not just in North America, as the lack of US Military participation had a major impact worldwide.

Obviously we cannot attend all the air shows worldwide or even in North America. However, ASR Media LLC has attended over 54 events worldwide this season. This was less than last year for the obvious reasons and due to our budgets too. While not all these events were air shows (some were military exercises), the large majority were. To judge which event was the BEST for 2013 from the air shows we attended was even harder than previous years.

In our opinion the Best Canadian show was the Great Lakes International Air Show, held at St. Thomas, Ontario. While it was not the largest in Canada for 2013, and lacked the pyrotechnics "Wall of Fire" that the CFB Bagotville had, it was the most welcoming and friendliest to the attendees and we received the most cooperation from the organizers! Thank you Hugh Shields and your excellent volunteer staff!

Our choice for the Best US based air show was "Lightning Strikes Chino!" the Planes of Fame's annual warbird extravaganza. The highlight was, of course, having five of the world's seven flying P-38 Lightnings in the air. Almost constant flying with over 40 warbirds in the air and many more on static display (including several rare or unique aircraft), great aerobatic performers, numerous veterans sharing their wartime experiences and almost perfect weather combined to make this our favourite. Honourable mention goes to TICO Warbird Air Show in Florida, the only show where the USAF Thunderbirds flew in 2013 and Wings Over Houston.

In 2013 the Best air shows to attend were in Europe. Many had three or more top tier International Aerobatic Teams, military participation (excluding US Military) and of course civilian ones too. Top contenders were; the 2013 RNLAF Open Days, Volkel AB, The Netherlands, RIAT 2013, UK, and the Hungarian International Air Show, Kecskemét, Hungary. Our choice for the Best European air show was the Royal International Air Tattoo at Fairford, UK. The Hungarian International Air Show, Kecskemét, Hungary was a close second!

When taking everything into consideration for all the air shows we attended in 2013, the Royal International Air Tattoo (RIAT) at Fairford, UK, was the Best of 2013. Congratulation to the organizers!

- The Best Canadian Great Lakes International Air Show, held at St. Thomas, Ontario, top right.
- The Best American was the Planes of Fame Air Show in Chino, California, middle.
- The Best European and the over all worldwide winner was the RIAT 2013, at Fairford, UK, bottom.







