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October ♦ November 2013
Volume 4, Issue 6

The Magazine



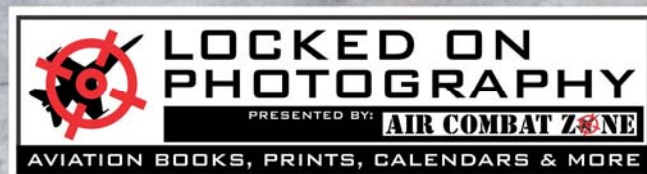
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- ✈ A-10: Up close and personal at Davis-Monthan AFB, AZ
- ✈ Inside the "Boneyard" 309th AMARG, Tucson, AZ
- ✈ And so much more...



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Cover: Maj. Kyle "SWAT" Lanto, 355th FW Heritage Pilot, photo by ASR Media LLC.

Index page: SSgt. Ruiz and Maj. Smiley, Lobo Maintenance Hangar, DM AFB, photo by ASR Media LLC



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Publisher and Editor: ASR Media LLC

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.

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

Welcome to our environmentally friendly October–November 2013 on-line issue of *The Magazine*.

The sequestered North American air show season is now just about over. Without the US Military participation the attendance suffered a great deal and resulted in several major air show cancellation. We hope that the 2014 season will be much better than the 2013 was for all parties involved.

To see military jets flying, as we are addicted to the speed and noise, we took steps to fill our readers needs by visiting several military bases. Some of these visits included military exercises in Turkey and Canada, as well on a bit more personal visit, such as at Davis-Monthan AFB, in Tucson Arizona. We also had the very rare opportunity to visit the 309th AMARG aka the "Boneyard" for a whole day. This was not your everyday bus tour. You can see our extensive coverage and images in this issue.

We would like to congratulate the base leaders at MCAS Miramar who made the decision earlier in July to proceed with the annual open house and air show held on October 4 and 5, despite the severe limitations of sequestration. The Miramar show will become the first air show or open house to be held on a U.S. military base since April 1 of this year.

MCAS Miramar Commanding Officer Colonel John Farnam makes a compelling case for the importance of Miramar's annual open house as a unique opportunity for the personnel at the base and the people of San Diego to interact and get to know one another. Farnam said, in part: "The air show is my opportunity to open the gates at Miramar...to allow you onto the base, to bring you to a place where most people don't get to go, onto our flightline." Although base personnel will be prohibited from even taxiing military aircraft while spectators are present, the show will include extensive static displays of military aircraft based at Miramar and a robust schedule of civilian performers, including the Patriots Jet team, Sean Tucker, the Shockwave Jet Truck, Chuck Aaron and the Red Bull helicopter, John Collver, Bret Willat, and Dan Buchanan.

Let's hope that the ACC Demo Teams will return too for the 2014 Season, it would be great to see the A-10, F-15E Strike Eagle and F-16 Viper Demo Teams perform along with the F-22, Thunderbirds and Blue Angels once again.

We will have a complete coverage of the MCAS Miramar Open House in our next issue, as well as other air shows we attended in Europe, Canada and in the United States from the past summer.



Aerotainment News

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Air Shows ★ Air Racing ★ Aviation Heritage

THE P-51C RED TAIL MUSTANG KEEPING THE TUSKEGEE AIRMEN'S LEGACY ALIVE

Article and photography by the Editor



If you frequent air shows in Canada and the USA, you can often see the "Red Tail" Mustang P-51C flying and as a static display. Reminding us of the contribution the Tuskegee Airmen made in the Second World War.

One of the pilots for the CAF Red Tail Squadron is a good friend of mine, Bill "Shep" Shepard. Shep is an accomplished pilot who also flies with the Canadian Harvard Aircraft Association; in fact, he was the past President of the Association. At a recent air show I had mentioned to him that it would be great to do a brief tribute about the Tuskegee Airmen and about what the Mustang represents. For the article, perhaps we could do some air-to-air photography of the Mustang to be used for illustrations. Shep agreed and we made arrangements to do this at the Great Lakes International Air Show (GLIAS), in St. Thomas, Ontario.

My photo plane was a Harvard (T-6) built in 1941, a similar trainer that would have been used by the Tuskegee Airmen during their pilot training, that was piloted by Greg Burnard of the Canadian Harvard Aircraft Association. The weather was far from ideal; low ceiling with misty clouds with on and off precipitation. It reminded me of one of the six principles of the Tuskegee Airmen "Never Quit." Thus, we proceeded.

The goal of the Commemorative Air Force (CAF) Red Tail Squadron is to share with everyone the inspiring history and legacy of America's first brave black military pilots, mechanics and support crews who fought in WW II and, who kept the planes in the air: the Tuskegee Airmen. The Tuskegee Airmen not only battled enemies during wartime but also fought against racism and segregation thus proving they were just as good as any other pilot. Their story has been featured in several Hollywood films such as: "The Tuskegee Airmen," 1995, and more recently in "Red Tails," 2012.

The CAF Red Tail Squadron uses the restored P-51C Mustang, an educational tool, along with the RISE ABOVE Travelling Exhibit. The travelling exhibit has a huge advantage over the aircraft. It can go to air shows along with the Mustang, but it can also go to schools, to youth oriented organizations and other events. The RISE ABOVE Travelling Exhibit, takes the story of the Tuskegee Airmen directly to those who will benefit from it the most. The exhibit is housed inside a 53ft long semi trailer with an expandable side. Visitors sit in climate controlled comfort and watch the original movie "RISE ABOVE" that is available as a DVD, on a 160-degree curved screen that really brings the movie to life.

The six principles of the Tuskegee Airmen are:

- 1) Aim High
- 2) Believe in Yourself
- 3) Use Your Brain
- 4) Be Ready to Go
- 5) Never Quit
- 6) Expect to Win

By using the Tuskegee Airmen as examples, anyone can learn and overcome trials and prejudices to accomplish great things.

Their name derived from the city of Tuskegee, Alabama, where the Air Corps officials built a separate facility at Tuskegee Army Air Field to train the black pilots.

There were 996 original Airmen. These included pilots, bombardiers, and navigators. More than 14,000 black men and women served as their vital support personnel.

The 99th Pursuit Squadron (later, 99th Fighter Squadron) was the first black flying squadron, equipped with Curtiss P-40 Warhawks fighter-bomber and the first to deploy overseas (to North Africa in April 1943, and later to Sicily and Italy).

The 332nd Fighter Group, which originally included the 100th, 301st, and 302nd Fighter Squadrons, was the first flying group. They were equipped for initial combat missions with Bell P-39 Airacobras (March 1944), later with Republic P-47 Thunderbolts (June–July 1944), and finally with the aircraft with which they became most commonly associated, the North American P-51 Mustang (July 1944). The group deployed to Italy in early 1944. In June 1944, the 332nd Fighter Group began flying bomber escort missions, and in July 1944, the 99th Fighter Squadron was assigned to the 332nd Fighter Group, which then had four fighter squadrons.

When the pilots of the 332nd Fighter Group painted the tails and the propeller of their P-47s and later, P-51s, red, they were nicknamed the "Red Tails." The Bomber crews nicknamed them the "Red Tail Angels" since the bombers considered their escorts, "angels."

Of the Tuskegee aviators, 66 died in combat. There were 32 Tuskegee Airmen who became prisoners of war. They flew over 700 bomber escort missions and ended the war as the only fighter group to never lose an escorted bomber to enemy fighters. The Tuskegee Airmen flew 15,533 sorties between May 1943 and June 1945. These black Airmen managed to destroy or damage over 409 German airplanes, 950 ground units, and sink a destroyer. They were the first to shoot down three German Me-262 jets in one day: pilots Charles Brantley, Earl Lane and Roscoe Brown all shot down German jets over Berlin during a raid on March 24, 1945.

For further information about the CAF Red Tail Squadron please visit: www.REDTAIL.org



ASR Media would like to thank Bill "Shep" Shepard, Greg Burnard and Hugh Shields Director of GLIAS, for their invaluable assistance and cooperation making the photo flight a possibility.

There is also T-6 that sometimes can be seen at air shows and is owned by the Tuskegee Airmen National Historical Museum, 6325 West Jefferson Avenue, Detroit, Michigan 48209, USA. I saw this aircraft at the Scott AFB air show in 2012, flown by Shep.





ANATOLIAN EAGLE 2013/2

REPORT AND PHOTOGRAPHY BY PETER THIVESSEN AND WOLFGANG JARISCH



ASR is reporting for the very first time from the “Anatolian Eagle Training Command Center” at Konya AB, Turkey. We were invited to attend the “Anatolian Eagle 2013/2” exercise. Konya is the home of the 3rd Main Turkish Jet Base.

Before we start our report about the exercise, a few words about Konya. Konya is a city in the central region of Turkey, 1200 m above sea level with a population of approximately 1,000,000 people. The origin of the city dates back to the 4th century BC, and therefore it is a very traditional historical city and an Islamic cultural center.

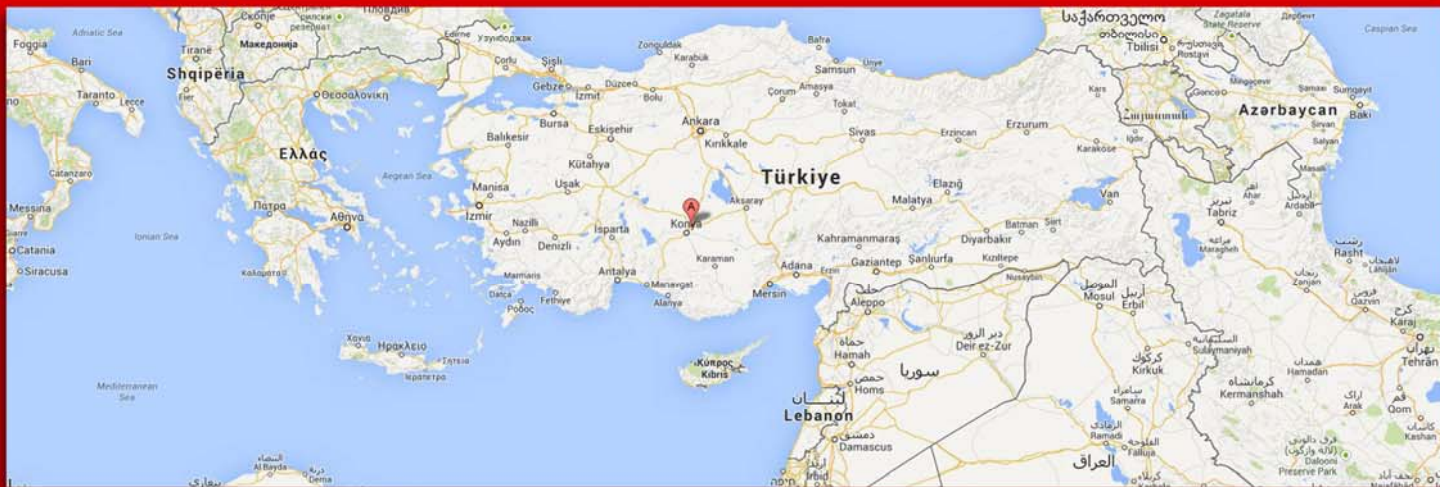
One could always see friendly and helpful people. Most of the inhabitants don't speak English but that is not a barrier. The food is extremely good but note, no alcohol available at most places! Only in a handful of places can one get beer, but it is not allowed to be consumed in public or in the hotel lobby. With no additional distraction we put all our energy into photographing and so we get back to the exercise.

As noted earlier this is a military exercise not a public event. To attend here, one needs an invitation. Note for spotters, it is not possible to take pictures from outside the base. It is an enormous base with no chance

to see anything from outside the fence. Similar to “Red Flag,” “Maple Flag,” or “Joint Warrior,” the “Anatolian Eagle” is one of the largest and most complex joint air force exercises in this part of the world.

Anatolian Eagle is composed of three separate exercises in 2013, nationally and internationally under the responsibility of the Turkish Air Force. These Exercises give the participants the perfect venue for maintaining and enhancing operational readiness. The Anatolian Eagle 2013/2 is the second one in 2013 and the first and only one having international participants.

Immediately before the start of Anatolian Eagle there were some cancellations. For example, the Omani Air Force completely cancelled its participation, and the Royal Saudi Air Force cancelled the participation of its Tornados. But it was really an interesting mix of aircraft here on the base.



Participating countries and types of aircraft included:



Turkish Airforce: 27 x F-16C and D ; 8 x F-4E ; 1 x KC C-135R ; 1 x C-130E ; 1x CN-235 Note: The F-16s were from the airbases Ankara/Akinci (141 Filo-Wulf and 142 Filo-Gazelle), Merzifon/Amasya (151 Filo-Bronze and 152 Filo-Raiders), Diyarbakir (182 Filo-Hawk), Balikesir (191 Filo-Cobra and 192 Filo-Tiger). The Phantom F-4Es came from the airbases Eskisehir (111 Filo-Panther) and Konya (132 Filo-Dagger).



Saudi Arabia: 8 x F-15C + D; 1xC-130H support aircraft.



United Arab Emirates: 6 x F-16E and F "Desert Falcon" Note: The UAE Air Force is the only operator of the Lockheed Martin F-16 Block 60 standard. Lockheed Martin developed this type specifically and only for the UAE Air Force, which received 80 of these jets between 2005 and 2010. And now the UAE Air Force wants to buy another 25 jets. It features the more powerful GE F110 engine, a Northrop Grumman APG-80 AESA radar, conformal fuel tanks (CFT), integrated infrared search and track (IRST) system and advanced electronic warfare system. Thus this is the best developed and most powerful version of the F-16 worldwide. 1xC-17 support aircraft.



NATO: 2 x E-3A Sentry
Number of personnel: 540 Turkish and 525 foreign.

The purpose of Anatolian Eagle exercise according from the Turkish Air Force:

- to train fighters for victory
- to systematically test and evaluate the fighters' combat readiness status and to manage the tactical training progress
- to establish a background and buildup knowledge for doing research about tactical air operations
- to enable fighter elements of the Turkish Air Force Command to reach the military goals in the shortest time and with minimum resources and effort
- to support the definition of operational requirements, supply and R/D activities
- to allocate the training environment in order to fulfil the requirements of the Turkish Air Force Command
- to support the tests of existing/developed/future weapon/aircraft systems

The training also provides experience in near real-life battle conditions in air defence and tactics, planning and execution. Since 2001, the Turkish Air Force have been involved with joint exercises with Gulf countries and NATO members, honing and enhancing their skills mutually. As a direct result the Turkish Air Force is better prepared for any future threats.

As we arrived on the first day we received a warm welcome at the main gate from officers from the base and also officials from the headquarters in Ankara. After the security checks we were brought to the briefing room after which we were able to go to the runway where we could choose between some different positions for taking pictures. This was well organized. A big compliment for these possibilities!

As our two day visit came to the end, the base commander Mr. Yasar Kadioglu wished us well with the following words: "Did you like it? I hope you had an enjoyable stay, and we will see you again next year."

ASR would like to express our thanks to the Turkish embassy in Austria and Germany. Especially to the Operations Commander, Colonel Yasar Kadioglu, the headquarters of the Turkish Air Force in Ankara, 1st. Lt. Mehmet Aslan and Uskup, and all the personnel on the base who assisted us for their generous cooperation, hospitality and friendliness. Thanks to all of you, it was a fantastic experience and we will see you again next year.



United Arab Emirates F-16E Block 60 taxiing for take off.

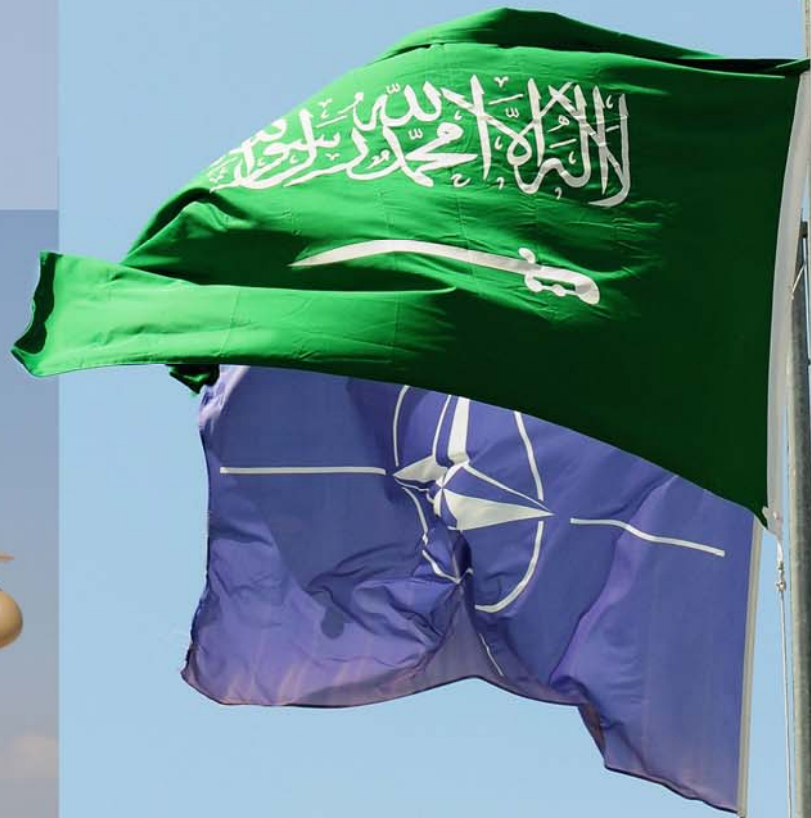
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United Arab Emirates C-17 Globemaster III.



Royal Saudi Air Force's F-15D above and C-130H below.



Turkish Air Force's F-16C and D above and below.



Eurocopter AS532 Cougar UL.





Turkish F-16C.



Royal Saudi Air Force F-15.



Turkish C-130E a former Saudi aircraft, above.
Royal Saudi Air Force's F-15's about to take off, below.



F-4E-2020 Terminator (73-1026) the latest version of the F4 Phantom making a hook arrestor landing.





Turkish Northrop F-5A-2000 and F-5B-2000 Freedom Fighter with F-16s lined up.



Turkish TAI Anka (Turkish Aerospace Industries Phoenix) UAV, below.



Just inside the main entrance to the Air Base.



The NATO AWACS, Boeing E-3 Sentry registered in Luxembourg, landing, above.



2013/2

Colonel Yasar Kadioglu, Operation Commander, Konya AB, in front of the F-4E-2020 Terminator, below.



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International tensions flowed over into all-out war in the Northern skies of Alberta and Saskatchewan this year from May 27th to June 21st as 4 Wing Cold Lake once again hosted the air forces of nations from around the world for Exercise Maple Flag 46 (MF46).

Thankfully the war was fought between a coalition force of allied exercise participants and an opposing force of aggressors whose role was being played by allied pilots and ground based members of the MF team using aircraft and surface to air threat simulators as part of the training exercise. The aggressors goal was to represent the forces of a warring nation to provide the participants with a realistic threat representative foe to prepare them for future conflicts. Major Forest "DB" Rock, 4 Wings Standards officer and Officer Commanding the RCAF's Air Force Tactics and Training Center (AFTTC) that organizes and runs MF, summarized the exercise as follows " "We take what exists out there in the world today as threats (build a war scenario around them) and we run it to challenge the participants and ourselves."

MF46 was comprised of two independent sessions, each two weeks in length. Most participants were present for either the first or second session but some participated in both. This year saw the Colombian Air Force - the Fuerza Aérea Colombiana (FAC) - participate for the first time during session one. The second session was highlighted by Singapore bringing their latest fighter acquisition, the F-15GS to MF for the first time. Here's a full list of this year's participants: Belgium, Colombia, Canada, Germany, the Netherlands, Singapore, the United Kingdom and the United States. Numerous other nations took advantage of the International Observers Program to observe the exercise and prepare for possible future participation. Colombia took advantage of the program during MF43 and 45 and found it very helpful in preparing them for this year's exercise. This year India, Chile, Oman, Peru, South Africa, South Korea and The Ukraine signed up for the observers program to learn more about Maple Flag as well as the procedures, tactics and techniques of their allied partners.



One of MF's greatest assets and a key component to allowing the exercise to deliver world class training to participant nations is the Cold Lake Air Weapons Range (CLAWR). Colonel J.R.P. Laroche, 4 Wing's Wing Commander, pointed out that "There are very few places in the world that have a range like Cold Lake. You could count them on one hand". The vast area of the range's uncontrolled airspace combined with live fire and live drop areas are enough make the CLAWR a highly desirable training ground. But the technology available on the range is what makes it a truly world class training facility. Equipped with leading edge Air Combat Maneuvering Instrumentation (ACMI) to record the actions of combatants during missions for post mission review and analysis, the range is also littered with target facilities and a wide array of threat simulators to create as realistic an environment as possible to match potential combat theatres. Pilots and crew not only develop their offensive combat skills during missions over the range but also it allows them to experience the reality of attack from ground based threats making a mission over the range as close to the real thing as safety permits.



Weather for most of the exercise was unusually cool and wet. While it minimally affected mission operations, unfortunately the yearly public MF Open House had to be cancelled due to the poor weather. Many of the local public were disappointed as they look forward to the opportunity of seeing up close many of the aircraft that fly missions overhead everyday.

Columbia's introduction to participation at Maple Flag had them bringing 111 members of the FAC and 4 paratroops from the Colombian Army. The FAC flew 6 Super Tucano A-29B light attack aircraft, 1 C130H Hercules and 1 KC767 Multi Mission Tanker Transport Jupiter aircraft.

Captain Mike "Ahab" York participated in an FAC milestone towards integrated operations with international partners as he became the first non-FAC pilot to connect and refuel from the Columbian KC-767 Jupiter tanker. Flying an RCAF CF-18 Hornet, Capt. York refuelled from the tanker on a qualification flight to clear CF-18's to tank from the FAC Jupiter tanker throughout the exercise. The day after the tanker arrived in Cold Lake the qualification mission was planned and executed with "absolutely no issues from either side. The next day we were working as though they were Columbians or we were Canadians" said Colonel Carlos Silva, the KC767 Package Commander and pilot.

The Colombian Herc and 6 Super Tucanos rendezvoused and started their journey to Cold Lake from Barranquilla on the northern coast of Colombia. The trip took 3 days and was completed in 7 legs with 1 stop in Jamaica, 4 in America and one in Canada before arriving in Cold Lake. All totalled the trip took 20 hours of flight time to cover the 6700 km journey.

During daily missions, the Super Tucano's took on the role of strikers for the first time learning how to integrate with other allied airborne assets and rely on them for protection from the opposing force's airborne fighters and ground based SAM threats. When asked how successful the exercises had been as a tool for achieving their training goals, Col. Silva responded "If we were at home it would take us years to get the experience that we have (at Maple Flag) in just two weeks". A testament to both the effort the FAC applied to preparing for and participating in the exercise as well as the world class training opportunity Maple Flag exercises offer to their participants.

Singapore's participation at Maple Flag 46 drew significant attention during the second session. While they've participated before with their F-16s, which they brought to the fight again this year, Maple Flag 46 marked the first time they had brought their latest fighter acquisition to Cold Lake, the F-15SG.



KC-767 Multi Mission Tanker Transport from the FAC



Colonel Carlos Silva (photo courtesy of FAC).



Boeing E-3D Sentry AEW1 from the RAF, above.



KC-10 Extender from the USAF, above.



Embraer EMB-314 Super Tucano A-29B of the Colombian Air Force

Certainly the most advanced production F-15 presently available, Singapore's F-15SG is arguably the most capable multi-role strike fighter in the world. At first glance the most obvious difference between the F-15SG and other Strike Eagles are the clean lines of the jet exhaust cones. The exposed mechanical structures of the Eagles typical Pratt and Whitney engines have been replaced with the smooth and clean looking exhaust of General Electric engines that provide over 10,000 lbs more thrust than the Eagle's original engines. But a closer look quickly reveals that this version of the Eagle has received more than an engine upgrade. Sharp forward looking blisters below the cockpit rails, multiple sensor pods for targeting, navigation and passive IR air-to-air target search and tracking, modified tail points with additional protective and countermeasure system sensors are all part of what put this aircraft with those at the top of the list of the world's most capable multirole fighters. But what can't be seen by looking at the aircraft may be what makes this plane the significant threat that it is. The AN/APG-63v3 advanced Active Electronically Scanned Array (AESA) radar carried by the F-15SG not only extends the Eagle's range but gives it the ability to perform air-to-air and air-to-ground tasks simultaneously while providing more protection to the aircraft than previous radars by reducing the ability of enemy aircraft to detect the radar's operation.

As Singapore's air force is well aware, the leading edge capabilities of any aircraft are only as good as the crew that fly it. By training their pilots and crew with the USAF and participating in world class multinational air exercises like Maple Flag, Singapore makes a significant investment to develop a well-trained fighter force that are capable of implementing their advanced aircraft to defend its interests in an area of the world with an ever changing and increasingly sophisticated national defense environment. Their repeated presence at Maple Flag attests to the confidence they have in the exercise to deliver a training environment as advanced as their aircraft.

But Maple Flag is no longer solely about air-to-air combat as it was when it began. The exercise is constantly expanding its scope to match the level of complexity that nations can reasonably expect of conflicts they could find themselves involved in. "Air Combat" now is widely understood to not only include air-to-air combat but also target strike, close air support, troop and cargo delivery on the battle field, combat search and rescue and more. Canada had a total of 6 non-fighter aircraft types flying on missions including 2 transport types and the CP-140 Aurora. Maple Flag participants come to the exercise to gain experience and train for all of these aspects of modern warfare. Hercules transport aircraft from Canada, Colombia and the United Kingdom along with a Canadian C-17 Globemaster were tasked with either cargo or paratrooper drops on each of the two missions run daily.



Singapore's F-15SG taking off, this one is based at Mountain Home Air Force Base, Idaho.



RSAF F-16C based at Luke AFB, AZ, landing, above.



Belgian F-16AM MLU with full afterburners, above.



Canadian CH-146 Griffon above and from within below.



Paratroops from Canada, Germany, Colombia and other nations had the opportunity to jump from other Force's aircraft giving them valuable experience with potential interoperability issues. Although all the forces may work under NATO procedures, individual nations interpret the standard procedures slightly differently and having this experience allows aircraft crews as well as the paratroops avoid issues that could threaten mission success during coalition operations.

Rotary wing assets were integrated into the missions with Canadian CH-146 Griffon helicopters from 403 and 430 Tactical Helicopter Squadrons making the long trip from New Brunswick and Quebec respectively to Cold Lake for the exercise. Tasking for the Helos included various mission types such as Close Air Support missions to provide protection for ground troops or "downed" air crews built into the mission scenario. Operating in the same high threat air defense environment as the fast movers, the Griffons flew low and fast to try to avoid surface to air threats, particularly the Man Portable Air Defense missile launch simulators so as not to become scored as downed air crews themselves.

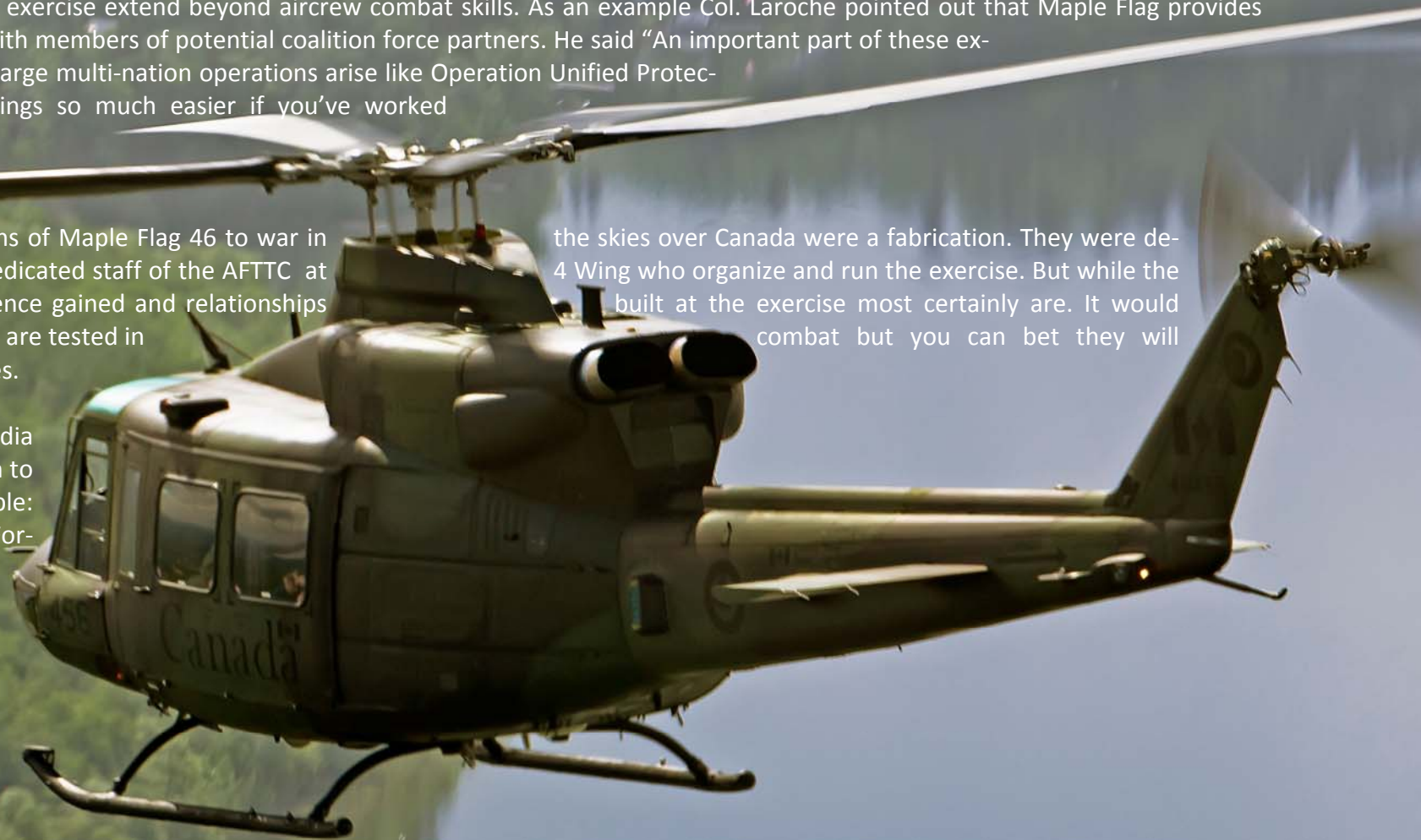
Cold Lake's 417 squadron supports the exercise in many ways. In one instance a section of paratroops landed too far from their landing zone to be picked up by those tasked to return them to the base. In this case 417 were called upon to pick up and return the paratroops to base.

The benefits that MF participants realize from the exercise extend beyond aircrew combat skills. As an example Col. Laroche pointed out that Maple Flag provides them with the opportunity to build relationships with members of potential coalition force partners. He said "An important part of these exercises is building trust". He suggested that when large multi-nation operations arise like Operation Unified Protector during the Libyan conflict "it just makes things so much easier if you've worked (together) before and prepared to the same level".

The mock tensions that lead the participant nations of Maple Flag 46 to war in developed with the help of the participants by the dedicated staff of the AFTTC at war scenario isn't real, the lessons learnt, experience gained and relationships hopefully be a very long time before these benefits are tested in prove to be an invaluable asset when the day comes.

The author, Locked On Photography and ASR Media LLC, would like to extend our deepest appreciation to the following people for making this article possible: Colonel J.R.P Laroche, Colonel Carlos Silva, Major Forrest "DB" Rock, Captain Sandra Bourne and Captain Holly Brown and the members of the RCAF and all other participants of Maple Flag 46.

the skies over Canada were a fabrication. They were de-4 Wing who organize and run the exercise. But while the built at the exercise most certainly are. It would combat but you can bet they will



CT-177 Globemaster III

CT-177 Globemaster III

CC-150T Airbus A310

CH-146 Griffon

CP-140 Aurora

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The Phantom era came to an end after 40 years of service in the German Air Force. To celebrate this historic event of decommissioning at the Wittmund Air Base, in north Germany (near the North Sea coast), "Jagdgeschwader JG 71 Richthofen" under the command of the Wing Commander Colonel Gerhard Roubal organized an open Day on June 29th, 2013.

To this exceptional event many units of the German Army, Navy and Air Force attended along with several foreign guest in two categories: civilian and of course military.

The Civilian guest list included:

- Fokker DR1 Replica in Richthofen colours
- Yak 52
- Focke Wulf Stiglitz
- Bücker BÜ 131 Jungmann
- Piaggio P-149D
- Douglas A-4 Skyhawk

From the German Army, Navy and Air Force:

- Sikorsky CH-53G
- Lockheed P-3C Orion
- Airbus A-319-115X
- MBB Bo-105P
- Transal C-160
- Panavia Tornados
- Eurocopter AS 532U2 Cougar
- Eurofighter Typhoons from different units

Foreign guests:

- Spanish Air Force with F-18 Hornets from ALA 12 (flew the Phantom from 1971-2002)
- Belgium Air Force with F-16 Falcons 349 Squadron
- Royal Air Force with Hawk T1 and Tornado GR4
- Royal Danish Air Force with Saab T-17 Supporter

Despite the weather conditions, with rain and dark clouds over 150,000 Phantom enthusiast spectators cheered on the last four and solo ship over flights above Wittmund Air Base. G-meter indicated 8.6 Gs for the crew of the Jubilee Phantom, pilot Lt. Col. Berk and in the backseat Wing Commander Colonel Gerhard Roubal, during their last over head flight without the Phantom being torn apart.

The history of the McDonnell Douglas F-4 Phantom II. is quite fascinating, considering that the F-4 entered service in 1960, originally flying for the U.S. Navy. In 1963 after studying its potential for close air support, the US Air Force added the F-4 to its fleet. Soon it was added to the U.S. Marine Corps' inventory. It was also the only aircraft used by both U.S. flight demonstration teams: the USAF Thunderbirds (F-4E) and the US Navy Blue Angels (F-4J).

The German Air Force (Luftwaffe) initially ordered the reconnaissance RF-4E in 1969, receiving a total of 88 aircraft from January 1971. In 1973, under the "Peace Rhine" program, the Luftwaffe purchased the lightened and simplified F-4F assigned to the fighter wing Jagdgeschader, JG 71 "Richthofen". The first two F-4F landed in August 1973. They were deployed as fighter aircraft. Between 1973 and 1975 the Luftwaffe received (175) F-4F Phantom IIs. They were flown in four fighter wings, always upgraded to the latest technical standard. Two additional reconnaissance wings were established and they were provided with 88 aircraft converted to the reconnaissance mission requirements. The F-4F for several decades, especially during the cold war, was the backbone of the flying aerial defence in German airspace.

(24) German F-4F Phantom IIs were operated by the 49th Tactical Fighter Wing of the USAF at Holloman AFB to train Luftwaffe crews until December 2004. In 1975, Germany also received (10) F-4Es for training in the U.S. In the late 1990s, these were withdrawn from service after being replaced by F-4Fs. Germany also initiated the Improved Combat Efficiency (ICE) program in 1983. The 110 ICE-upgraded F-4Fs entered service in 1992, and remained in service until 2013 replaced by the Eurofighter Typhoon. All the remaining Luftwaffe Phantoms were based at Wittmund with JG 71 and WTD61 at Manching AB, and as noted in this article the last time they flew was on on 29 June 2013. The German F-4Fs flew 279,000 hours from entering service on 31 August 1973 until retirement.

The Phantom is a strange looking aircraft and has been called "double ugly," "rhino," "old smokey," "Air Force diesel," and even less flattering names. When compared to other comparable aircraft the design does have its share of ungainly bends and angles. It also proves that with enough thrust anything will fly! The Phantom II is also one tough aircraft, many were severely damaged and still made it back to their airfields in Vietnam.

To commemorate the Pharewell, the Luftwaffe presented a jubilee-phantom in special color scheme. The F-4F with the ID 37-01 was the first Phantom, which was put into service in Germany in 1973 and was also the last one to be flown in Wittmund. This was the star during the last flight in the colours blue-gold. On the fin: Spooky with the right hand on the forehead and the written words "Ich melde mich ab", which means "Over and out".

There were additional special colour schemes to the standard grey (Luftwaffe Norm 90 color scheme) F-4s at celebration. "38-10" two-tone gray and green Luftwaffe Norm 72 color scheme from the early 1970's with large serials on the fuselage. This scheme reflecting the air to ground role for the first 20 years of service. "38-33" dark grey and light grey, Luftwaffe Norm 81 color scheme for air to air missions. "38-28" 45 Jahre in Schortens – remembering the last depot inspection. "38-64" Golden HPO (Hourly Postflight Inspection). "37-15" with external fuel tanks German colors and a sensor pod in Bavarian colors. "38-13" in black and orange colour scheme.

During our brief interview with the crew of the jubilee-phantom, Lieutenant Colonel Berk stated "the jubilee Phantom was the best of the four" with a big smile in his face.

The Eurofighter Typhoons replaced the F-4Fs officially on July 1st, 2013. The first nine of them are based in Wittmund. With the reorganisation of "Bundeswehr" the formerly squadron JG 71 will be renamed "Taktischen Luftwaffengruppe Richthofen" and inserted into the Wing 31 "Boelcke" in Nörvenich. Until 2018, (20) Typhoons will be based in Wittmund. The characteristic red "R" on the front of the fuselage will continue to be the recognition of the Wittmund-Eurofighter.





- 38-28, top.
- 38-33, middle.
- 38-10, bottom.





- 37-22, top.
- 38-13 middle.
- The new and the old, bottom.



Wing Commander Colonel Gerhard Roubal and Lt. Col. Alexander Berk

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- The F-4F 4 ship formation left top, right top and right bottom.
- Filmstrip, left: The Eurofighter from JBG 31 Boelcke from Nörvenich lands as the replacement for the Phantoms. 31+00 (with two different tail schemes) was the 100th example delivered to Germany Air Force. Bücker BÜ 131 Jungmann, Spanish EF/A-18A and Belgian F-16AM.
- The technicians are for the last time on the Phantom and doing the wave, left bottom.



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VECTREN DAYTON AIR SHOW

REPORT AND PHOTOGRAPHY BY DAN ADAMS AND RICARDO VON PUTTKAMMER



The 39th annual Vectren Dayton Air Show was held June 22-23, 2013 at Dayton International Airport. In what has been an already challenging year for the air show industry, the Dayton show epitomized those challenges on many fronts. Despite these obstacles, the show managed to persevere and entertain the crowds as it has for nearly 40 years. With most air shows canceling this year due to the effects of sequestration budget cuts (which means no US military participation whatsoever at any air shows), the organizers of this show decided to push forward and managed to put together an impressive lineup including world-class aerobatics, classic warbirds and even some jet noise.

Their tremendous efforts were however overshadowed by a tragic accident during the Saturday show that took the lives of popular wingwalker Jane Wicker and her pilot Charlie Schwenker. The accident, which occurred right in front of the horrified crowd, caused the cancelation of most of the Saturday show and although the show continued on Sunday, it was with a heavy heart. An estimated crowd of 23,000 attended in total, a significant drop from previous years. The accident and lack of military participation definitely impacted attendance. Our thoughts and prayers go out to the families and friends of Jane Wicker and Charlie Schwenker.

The show's lineup included such aerobatic superstars as Melissa Pemberton, Skip Stewart, Sean D. Tucker and Michael Goulian. Melissa had an especially busy weekend. She was featured both days performing the opening act by flying her Edge 540 around a 7,500 square foot U.S. Flag (the largest of its kind) as it was being flown down by a member of Team Fastrax, a parachute team from Ohio. She also raced the School Jet Bus, performed her solo aerobatic routine and, to top it all off, celebrated her 29th birthday. In addition, the show featured such warbirds as the F4U Corsair, P-51 Mustang "Red Tail" flown by Bill Sheppard and B-29 Superfortress "Fifi" (the only flyable example in the world), flown by Neils Agather. Jet noise was supplied by Randy Ball's MiG-17F, an F-86F Sabre flown by Paul Wood and the School Time Jet Bus, driven by Paul Stender and powered by a General Electric J-79 engine. An extra attraction in the air, and on the ground, was an Air Tractor AT-301 painted as Dusty Crophopper, part of Disney's promotion of the upcoming movie Planes. The show was capped off by an incredible demonstration of flying precision by the Aeroshell Aerobatic Team flying their AT-6 Texans and the Great Wall of Fire, by Rich's Incredible Pyro.

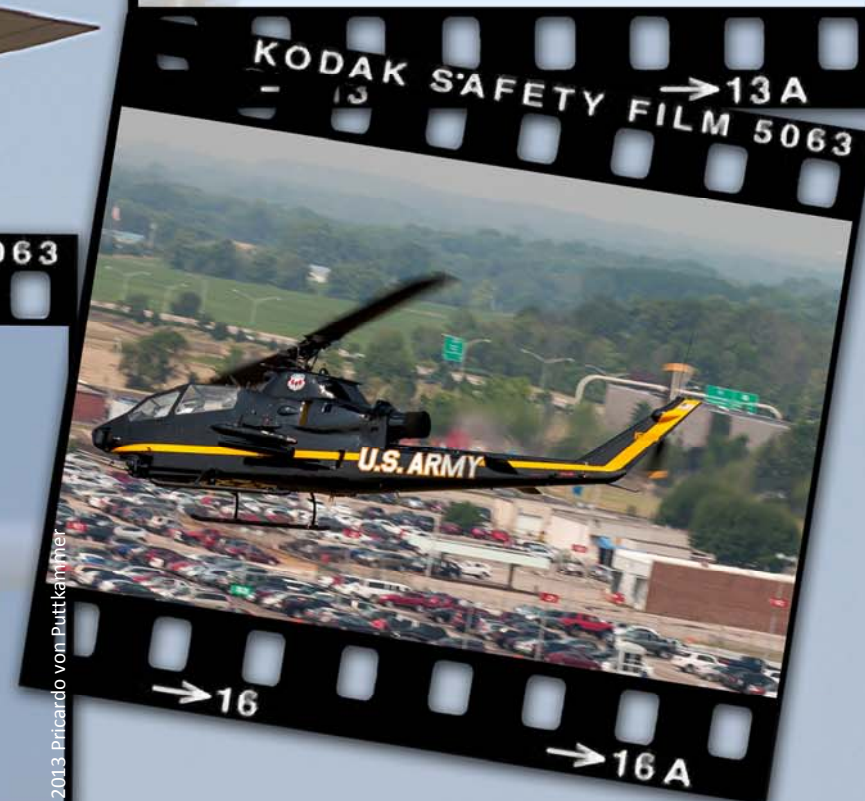
There were fewer aircraft on static display than previous years, again due to lack of U.S. military participation. Some of the aircraft on static display included a North American T-2 Buckeye, a Beechcraft T-34A Mentor, B-25J "Champaign Gal" and a FedEx 757.

We had the pleasure of flying with both the North American AeroShell Aerobatic Team and the UH-1 Huey of the Sky Soldiers Demonstration Team from the Army Aviation Heritage Foundation and thank them for the opportunity. We also thank Shiela Wallace and her group of volunteers for all their assistance throughout the weekend.

The Dayton show, though marred by tragedy this year, is a well run and action packed show that should be on your list of air shows to attend annually. The fact that it is held only minutes from the National Museum of the United States Air Force, arguably one of the best aviation museums in the world, is an added plus.



- Wright Brothers Flyer replica, mid-page.
- Melissa Pemberton during the opening ceremony, top.
- Jane Wicker and her pilot Charlie Schwenker, just before their tragic accident, middle.
- AH-1F from the Sky Soldiers Demonstration Team, bottom right.
- Michael Goulian with his Extra 330SC, bottom middle.



DIGITAL CHROME 1 A ©2013 ASR MEDIA LLC



Mark Henley, Team Lead for the AeroShell Aerobatic Team.

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UH-1H of the Sky Soldiers.

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F-86F Sabre.

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Skip Steward's Extra 330SC.

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The Royal Navy proved, they had what it takes to put on their annual "Flare-Day" at their home base of Yeovilton, in the south-west of England, despite a number of last minute cancellations by the Czech AF Mi-24 Hind, and the Swiss AF Hornet, it still proved a visual aviation treat, ably assisted by the Commando Helicopter Force Assault Finale, and the addition of aircraft deploying flares as part of their display.

The airbase is now home to the latest addition to the Royal Navy, the Agusta Wildcat, this updated version of the venerable Lynx is coming into service, and one highlight of the show was the formation of the Fairey Swordfish flanked by two Wildcats. The Royal Navy also put on their Lynx/Wildcat Maritime demo which is composed of a display of up to 5 aircraft displaying various roles the aircraft performs.

A number of interesting military items in the static display was a soon to be retired RAF VC-10, a Belgian AF C-130, a Czech AF CN-295, a German Navy Lynx, a Polish Navy PZL M28-1R Bryza and a pair of RNLAFC-7's. The Empire Test Pilots School at nearby Boscombe Down also sent their Avro RJ100 and an Agusta 109, which was a very welcome addition to the static display.

The airday at Yeovilton also attracts a number of classic jets and warbirds, the jets being represented by the Vulcan, and the recently airworthy Sea Vixen, even though it flew in to be on static display. The warbirds included a Spitfire, Mustang and a very large and quite nimble Skyraider. The home based Royal Navy Historic Flight displayed their Sea-Fury which showed off its powerful radial engine to full effect with some fast passes.

The RAF were not to be outdone by their Navy brethren and provided the Typhoon, Tucano and the Chinook, this helicopter demonstrated its power and grace as it hover taxied forwards and backwards on its rear undercarriage.

The Fairey Swordfish flanked by two Royal Navy Wildcats.



The Belgian F-16 Viper complete with smokewinders, provided noise and lots of flares through its impressive performance and clear blue skies, The Czech AF displayed two of their jets, the Tiger tailed Saab Gripen, and the ALCA Jet. The Gripen provided a tight punchy display again with the addition of flares, The ALCA jet developed from the L-39 was quite dynamic and showed its power and aerial ability for the crowd.

On an international note the Royal Jordanian Falcons team displayed their Extra 300,s but due to a cracked windscreen, from the UK sunshine, they could only put up a three ship, rather than their usual fourship, so their solo display pilot had to watch from the ground. The formation display teams were represented by the Red Arrows, and the RV8tors, in their homebuilt RV-8 aircraft. An interesting civil aircraft which did a few passes was a Saab 2000 of Eastern Airways.

Now on to the finale, imagine an airfield that has been attacked and a number of civilians have been taken hostage, the Commando Helicopter force has to retake the airfield and see off the attackers, this involves up to 3 passes of the crowd line by eight helicopters, ranging from 5 Seaking Commando, 2 Wildcats, an Apache providing top cover and 2 x Royal Navy Hawks acting as fast jets. As each pass goes by the force deploys marines, various equipment i.e landrover, a 105mm artillery etc. All of this is followed up with various pyrotechnic displays of smoke, and fire, soldiers running around, accompanied by various tracked vehicles. The finale alone is worth seeing!!!!!!! So this is one for the Rotorheads....



- The Belgian Air Force 's Agusta A109 Solo Display had a "Flare " of a time with their demo, above.
- WWII foes, now fly along each other, Spitfire with the Me-109 look alike Hispano Aviación Buchón, mid.
- Nothing like a bit pyro, below.





FLYING HERITAGE COLLECTION

The Flying Heritage Collection museum, located at Paine Field in unincorporated Snohomish County between Everett and Mukilteo, Washington, houses an impressive collection of World War II fighter aircraft.

Paul Allen, co-founder of Microsoft, began acquiring and preserving these planes in 1998. His passion for historical aviation motivated him to find and restore the iconic fighter aircraft of the U.S., British, German, Russian and Japanese air forces. One of the unique features of this collection is the goal of returning these planes to the sky. Almost all of the aircraft, some of which are the last of their kind, are in flying condition. Each summer various planes from the Flying Heritage Collection are flown to keep them operational and exercised on a regular basis.

During Free Fly Days at the museum the public is invited to watch as selected aircraft take to the skies. Before the flying commences military aviation historian Cory Graff provides historical information on the aircraft and introduces the pilots. The aircraft then take off in front of the crowds and perform a series of passes. Entrance to the field and watching the flying is complimentary, but a visit to the museum (Adults - \$12, Seniors/Military - \$10, Youths (6-15) - \$8) is a great way to finish the day. Not only do you get to see the rest of the collection, you also get to meet and interact with the pilots.

ASR was privileged to attend the Free Fly Day on June 29, which featured the inaugural public flight of the Grumman F6F-5 Hellcat. It was paired up with its primary adversary, the Mitsubishi A6M3-22 Reisen (Zero). The aircraft were shown off to good effect by Carter Teeters and Kevin Eldridge, respectively.

More information about the FHC and upcoming events can be found at <http://www.flyingheritage.com>.



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P-51D MUSTANGS



KAYDET N2S-3



P-51D MUSTANG QUICK SILVER



C-46 COMMANDO



B-25J MITCHELL



HURRICANE MK IV



TBM-3U AVENGER

A-10: Up close and personal at Davis-Monthan AFB, AZ

Article by the ASR Team with photography as noted





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"Laszlo, you will have to come and visit us at DM sometime soon,"

was my December 2012 invitation from Major Patrick Smiley, Assistant Director of Operations, 358th Fighter Squadron (Lobos), based at Davis-Monthan Air Force Base (AFB), in Tucson, Arizona.

For those who are not aware, Davis-Monthan AFB is the home of the 355th Fighter Wing, the largest contingent of A-10s. It is the former home of the A-10 West Demo Team, (axed unfortunately due to the sequestration with the rest of the ACC Demo Teams. We hope that some type of A-10 Demo Team will be activated for 2014!) and several other tenant units call DM home. Twelfth Air Force, the 563rd Rescue Group and the 309th Aerospace Maintenance and Regeneration Group (AMARG) are all based out of Davis-Monthan.

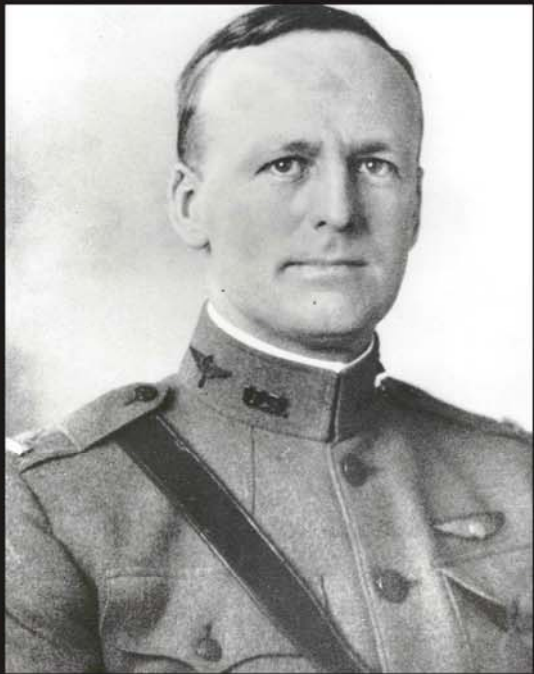
The 358th Fighter Squadron is a part of the 355th Fighter Wing. The mission of the 358th FS is to train, educate, and mentor the world's finest close air support attack pilots in, unquestionably the best attack aircraft since the 1970's deployed and proven in combat, the Fairchild Republic A-10 Thunderbolt II, more commonly known by its nicknames "Warthog" or "Hog".

After several email exchanges with Maj. Smiley, 1st Lt. Sara Ruckriegle, the Public Affairs Officer for the 355th Fighter Wing and AirShowsReview, we set a tentative date toward the middle of August for our visit that would include an extensive in-depth look of the 358th FS, and 309 AMARG, that is also known as the "Boneyard". These base visit invitations are not exactly easy to get, or to set up. They are not a group tour, and it takes a lot of resources and time for all involved. When I am/ASR Media is invited, it is a real privilege for us to attend such a visit, and more importantly to work with our host to give them the best exposure that ASR can provide.



Courtesy of the USAF

Sitting in the business office of the A-10C, with Major Kyle "Swat" Lanto, 355th FW A-10 Heritage Pilot, to the left. A Warthog from the 357th FS Dragons firing a short burst from its mighty 30mm Avenger gun at the Barry M. Goldwater Firing Range, above.



Lt. Oscar Monthan



B-24 at DM circa 1942



B-24 "Slugger" at DM circa 1942



B-29 at DM circa 1945

The history of Davis-Monthan Air Force Base is quite fascinating as we were informed by Larry Herndon, 355th Fighter Wing Historian. Here is a brief version.

Construction of the municipally owned airfield site was completed in late 1927. The dedication and opening of the airfield was on September 23, 1927, by none other than Charles Lindbergh, who months earlier crossed the Atlantic in the "Spirit of St. Louis." The airfield was dedicated in the honour of Lieutenants Samuel H. Davis and Oscar Monthan, two Tucson aviators who died in separate plane crashes in the 1920s while on duty. Davis-Monthan Field, as it was known at the time, immediately became the largest municipally-owned airport in the USA.

Samuel H. Davis enlisted in the Army at Tucson, and was granted a commission as an officer. At first Davis served at Fort Huachuca, and then was sent to Kelly Field near San Antonio, Texas, where he became an aviator. Davis left the Army in 1919 and managed a commercial airport in Tucson, but soon was recalled to the reserves. In 1920, he was assigned to Carlstrom Field, at Arcadia, Florida where he died when his airplane crashed in 1921.

Oscar Monthan, born in England 1885, moved to Canada and then to the Tucson area when he was 15 years old. After enlisting in the Army Air Corps in 1917, he was sent to the Boston School of Technology for officer training, where he studied engineering. He was commissioned in 1918 and sent to Maxwell Field, Alabama, where he served as a ground officer. Monthan received his wings as a pilot just after armistice was signed on Nov. 11, 1918. In 1920, he became the Chief Engineer at Rockwell Field in San Diego, California. In 1922, he was in charge of the Air Corps Engineering School at McCook Field in Dayton, Ohio. In 1923, Monthan was assigned to Lake Field in the territory of Hawaii. He was considered one of the Army's finest aeronautical engineers. On March 27, 1924, Monthan and four other airmen died in the crash of their Martin B2 (NBS-1) bomber while on a training mission. As a side note: Only 15 of these bombers were made by the Army for Night Bombardment-Short Distance. It was also the bomber that General Mitchell used in the famous ship bombing trials flying out of Langley Field Virginia in 1921.

The military presence began at the Davis-Monthan Field on October 6, 1927 when Staff Sergeant Simpson transferred the military aircraft refuelling and service operations from the old municipal airport. With only two military personnel assigned to the field, the airfield did not play a significant role until 1940. The War Department officially announced a decision to establish an Army Air Base in Tucson on September 29, 1940.

Initially named Army Air Base, Tucson, Arizona, it was officially activated by the Army on May 1st and the 1st Bombardment Wing Headquarters assumed command of the field. In late May personnel and first aircraft (mostly obsolete Douglas B-18 Bolos, LB-30s, A-29s, and Stearman PT-17 trainers) arrived. On December 1, 1940, the base was formally named Davis-Monthan Field, once again.

The outbreak of World War II brought major changes to Davis-Monthan, beginning with elements of the 1st Bombardment Wing and 41st Bombardment Group departing for the Pacific. In January 1942 jurisdiction of the field transferred from Fourth Air Force to Second Air Force. The following month the 39th Bombardment Group (BG) arrived and immediately began training B-17 Flying Fortress and B-24 Liberator units and crews, initially as an Operational Training Unit (OTU) and later as a Replacement Training Unit (RTU). By mid-year B-24 Liberator training became the sole mission of the 39 BG as all other flight training was phased out. B-24 Liberators would fill the skies over Tucson until late 1944 when the Army Air Force's latest bomber arrived. In December Davis-Monthan became home to the B-29 Superfortress until V-J Day (Victory over Japan) in August. With the end of WWII came drastic mission changes for Davis-Monthan Field, the non-stop flightline operations fell silent as the mission of the airfield was in transition.

At the start of the Cold War era, the newly activated Strategic Air Command (SAC) assumed control of the base. Two months later two B-29 Bombardment Groups, the 40th and 444th, arrived and once again the sights and sounds of the B-29 Superfortress filled the skies of Tucson. On October 1, both units were deactivated and their personnel and aircraft were transferred to the newly activated 43rd Bombardment Group (BG). In September 1947 the Air Force became a separate branch of service and the 43 BG achieved "Wing" status. On January 13, 1948 Davis-Monthan Field was officially redesignated Davis-Monthan Air Force Base.

The following month on February 20 the first B-50 Superfortress II, A-Model serial number 46-017, arrived at Davis-Monthan AFB and was delivered to the 43 BW. On June 18, the 43rd Air Refuelling Squadron (ARS) was assigned to Davis-Monthan AFB. The 43 ARS had the honour of being one of the first two air refuelling squadrons in the Air Force, flying the KB-29M.

Davis-Monthan AFB entered the "Jet Age" in February 1953 when the 303rd BW received four Lockheed T-33 Shooting Star training jets. Just one month prior construction on the new 200 foot wide by 11,500 foot long runway was completed in preparation for the arrival of the first jet bomber, the B-47 Stratojet.



B-47 Stratojet from DM c.1953



F-4 Phantom IIs at DM c.1969



A-7D welcome 355 TFW c.1971



The new A-10A Thunderbolt II in 1976



DC-130 from DM with drones C.1977

The first three Stratojets appeared in late March and were also assigned to the 303rd BW. The following month fighter interceptor jets arrived when the Air Defense Command (ADC) activated and assigned the 15th Fighter Interceptor Squadron (FIS) to Davis-Monthan. Initially the unit was equipped with the F-86A Sabres until it upgraded to the modern supersonic capable "D" model one year later. The F-86D remained the squadron's primary weapon system until 1959 when the F-89 Scorpion replaced it. The final aircraft change occurred in 1960 when the F-101B Voodoo became the unit's interceptor. The Voodoos remained in this role until the 15th FIS inactivated on December 24, 1964.

The decade of the 1960s brought sweeping changes to Davis-Monthan AFB. Within the first few months of the decade the 36 AD was inactivated and the 43 BW departed DM to become the Air Force's first B-58 Hustler Wing. DM was also selected to become home to an Intercontinental Ballistic Missile (ICBM) wing.

The increased conflict in Vietnam and the escalating involvement of US forces brought more changes to DM. On July 1, 1964 Combat Crew Training (CCT) officially returned to DM with the activation of the 4453 CCTW. DM's initial CCT program had ended suddenly with the abrupt ending of World War II in August 1945. Relocating from MacDill AFB, Florida with nearly 50 F-4 Phantom II aircraft, the primary mission of the wing was to train all aircrews for the conversion of 12 tactical wings to the F-4C fighter-bomber jet. The 4453 CCTW trained a majority of F-4 crews for the conflict in Southeast Asia.

Before the end of the decade DM would have one more unit change. On June 25, 1966 the 4080 SRW inactivated while at the same time the 100 SRW activated. All personnel and equipment from the 4080 SRW transferred to the new unit, including the recently assigned DC-130As, CH-3C helicopters, and the remotely piloted drones. The special order that directed the redesignation also specified that the 100 SRW would continue the U-2 reconnaissance missions of the 4080 SRW. As a result of the conflict escalating in Vietnam more forward operating locations were setup throughout Southeast Asia for reconnaissance and drone missions.

Davis-Monthan's operations tempo during the 1970s was as busy as the three previous decades. On July 1, 1971 the Air Force reactivated the 355th Tactical Fighter Wing (TFW) at Davis-Monthan with the Vought A-7D Corsair II as the primary weapon system. The wing was initially composed of the 11th Tactical Drone Squadron (TDS), 333rd, 354th, 357th, and 40th Tactical Fighter Squadrons (TFS). The primary mission of the 355 TFW consisted of training pilots and maintenance personnel for combat deployments world-wide. In September 1971 the 355 TFW became the major TAC unit on base with the 4453 CCTW inactivating and relocating its F-4s to Luke AFB. The 358th TFS, one of the 355th's original WW II squadrons rejoined the wing upon reactivation on June 1, 1972. The same day, the 40 TFS was relocated to George AFB, California. In August 1972, the 355 TFW was declared "combat ready" and began deploying to Thailand augmenting the 354 TFW, which was flying combat missions in support of the Cambodian government. The wing also augmented a detachment at Howard AFB, Panama with personnel and aircraft while maintaining A-7D training and drone operations. Another DM unit made history in March 1974, this time it was an unmanned flight. The 11 TDS conducted the first launch of a live AGM-65 Maverick missile from a remotely piloted vehicle, scoring a direct hit at Dugway Proving Grounds, Utah.

In early 1975, the 355 TFW prepared for conversion to the nameless Fairchild Republic A-10. It would be three years before the name Thunderbolt II was officially selected for the A-10. In October 1975 the 355th Tactical Training Squadron activated to conduct A-10 academic training. Four months later, on March 2, 1976 the wing received the first A-10. In the midst of constant change, jurisdiction of DM was officially transferred from the Strategic Air Command to Tactical Air Command on September 30, 1976. It was also on this day that the 355 TFW became DM's host wing. Before the close of the decade two additional changes would occur.

On September 1, 1979 the 355 TFW was redesignated the 355th Tactical Training Wing and on October 2, the last A-7D mission was flown ending an eight years presence at DM.

Fast forward to the 1990s. The 355 TTW continued to train A-10 crews for assignments to units in the United States, England and Korea. During this period, the 355 TTW deployed Airborne Forward Air Controllers (FAC) in their OA-10 aircraft to Operation DESERT STORM Desert providing nearly 100% of this capability to the war. During the campaign A-10s flew 8,100 sorties destroying more than 1,000 Iraqi tanks, 2,000 military vehicles, and 1,200 artillery pieces. The A-10s also maintained a mission capability rating of 95.7% while launching 90% of the AGM-65 Maverick missiles in the conflict. On October 1, 1991 the 355 TTW was redesignated as the 355th Fighter Wing (FW). As a result of the Gulf War, Air Force Leadership deemed it appropriate to remove all Tactical and Strategic terms from unit designations.

On May 1, 1992 the Air Force policy of "one base-one boss" was implemented. This resulted in all Air Divisions, including the 836 AD, being inactivated. With this action, the 355 FW was once again DM's host wing. Other changes occurred on this day with the 41st Electronic Control Squadron (ECS) and 43 ECS, flying EC-130E Compass Call aircraft being assigned to the 355 FW, this resulted in its redesignation as the 355th Wing (WG). The EC-130E Hercules aircraft carried an airborne battlefield command and control center capsule that provides continuous control of tactical air operations in the forward battle area and behind enemy lines. This capability added yet more strength to the wing's combat capability.

EC-130E Hercules



Courtesy of Larry Herndon, 355th Fighter Wing Historian

In 1995, the 355th Wing began supporting Operation SOUTHERN WATCH with deployments to Al Jaber, Kuwait to ensure compliance of the 32nd parallel southern no-fly zone. Twelve A-10s were deployed in 1995 followed in 1997 by 24 A-10s. In 1998 the wing deployed 16 A-10s, and in 1999 14 A-10s were deployed. As part of the Air Expeditionary Force (AEF) concept the wing was tasked with a deployment every 15 to 18 months.

The attacks on September 11, 2001, led to the initiation of three missions--Operation ENDURING FREEDOM in Afghanistan, which Davis-Monthan currently continues to support, Operation IRAQI FREEDOM (Renamed Operation NEW DAWN), and Operation NOBLE EAGLE. After the execution of OEF, eight A-10s from the 355th Wing

were deployed to Bagram AB, Afghanistan to fly close air support missions supporting multinational ground forces. In 2003 and 2005, the 354th Fighter Squadron "Bulldogs" deployed on five-month deployments to Bagram Air Base in Afghanistan. During these deployments, the Bulldogs provided 24-hour air presence.

The 354th Fighter Squadron returned to Afghanistan in April 2007 for a six-month deployment. Again, they provided 24-hour presence and Close Air Support to coalition forces of Operation ENDURING FREEDOM. In 2009 the 355 FW made history deploying the first A-10C unit and maintenance personnel to Kandahar Airfield, Afghanistan. In 2011 the unit deployed for another six months, only this time it would be to Osan AB, Republic of Korea, in support of Pacific Command's Theater Security Package. The 354 FS returned once again to Bagram AB in September 2012 for a six month deployment in support of OEF, an operation that continues to this day.

In the midst of all the deployments, realignments and changes still occurred with the 355th. In September 2002, the 48th, 55th, and the 79th Rescue Squadrons (RQS) transferred under control of the 355th Wing, equipped with HC-130 aircraft and HH-60 helicopters. At the same time, the 41st and 43rd Electronic Combat Squadrons were realigned under the control of the 55th Electronic Combat Group (55 ECG). While personnel and aircraft remained on Davis-Monthan AFB operational control of the 55 ECG was assumed by the 55th Wing at Offutt AFB, Nebraska. Additionally, one other major wing realignment occurred on 1 October 2003 with the activation of the 563rd Rescue Group on Davis-Monthan AFB. Control of the 48th, 55th, and 79th Rescue Squadrons (RQS) was passed to the new group with the 23rd Wing assuming operational command of the unit. With only fighter aircraft assigned to the 355 WG, the wing was once again redesignated as a Fighter Wing on 26 April 2007. Currently the 355th Fighter Wing is composed of four groups: the 355th Operations Group, the 355th Maintenance Group, the 355th Mission Support Group and the 355th Medical Group.



USAF photo

Other units currently assigned to Davis-Monthan AFB are 12th AF headquarters, 309th Aerospace Maintenance and Regeneration Group, 55th Electronic Combat Group, 563rd Rescue Group, and the 162nd Arizona Air National Guard Alert Detachment. Other federal agencies using the base include the Federal Aviation Administration and the U.S. Immigration Customs Enforcement (ICE) air service Branch. Approximately 6,000 military and 1,700 civilian employees work at Davis-Monthan and nearly 13,000 military retirees reside in the Tucson area.

Over the years, DM has hosted air shows and open houses, drawing 200,000 or more people every two years. Hopefully some type of Open House and air show displaying the capabilities of the USAF, including an A-10 Demo Team for 2014 will happen with the 2013 fiscal year sequestration ending soon.



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The last A-10 West Demonstration Team 2010-12 that flew from DM all over North America to thrill millions of air show spectators.

Our DM itinerary was scheduled for two days, with the first day at 309th AMARG Boneyard and the second day with the 354 FS. We met SSgt. Ruiz from the 355 Fighter Wing Public Affairs Office at the main entrance gate at 08:00. After we were issued visitors passes, we drove to the Heritage Park just inside the base to start our visit.

At the Heritage Park (it used to be called Warrior Park) several aircraft are on display that reflect some of the types which were based out of DM over the years, including: A-10A Thunderbolt II, F-105 Thunderchief, F-4 Phantom, A-7D Corsair II, F-100 Super Sabre, C-130 Hercules, O-1 Bird Dog, OV-10A Bronco, H-3 Jolly Green Giant, and a Lockheed U-2. If one Googles the satellite image of the base, it will show a B-52 among the aforementioned aircraft displayed, unfortunately the B-52 is no longer there. See the images on the following pages.



Map data ©2013 Google



A-7D Corsair II



F-105 Thunderchief



A-10A Thunderbolt II



F-100 Super Sabre



F-4 Phantom II

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C-130 Hercules



OV-10A Bronco



H-3 Jolly Green Giant





O-1 Bird Dog



U-2C Dragon Lady

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MIA Memorial



INF Treaty Commemorative plaque

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After spending about an hour or so taking images, SSgt. Ruiz, drove us to the adjoining 309th AMARG base entrance for our Boneyard tour that lasted all day. For details of our visit and images please see our separate article starting on page 76.

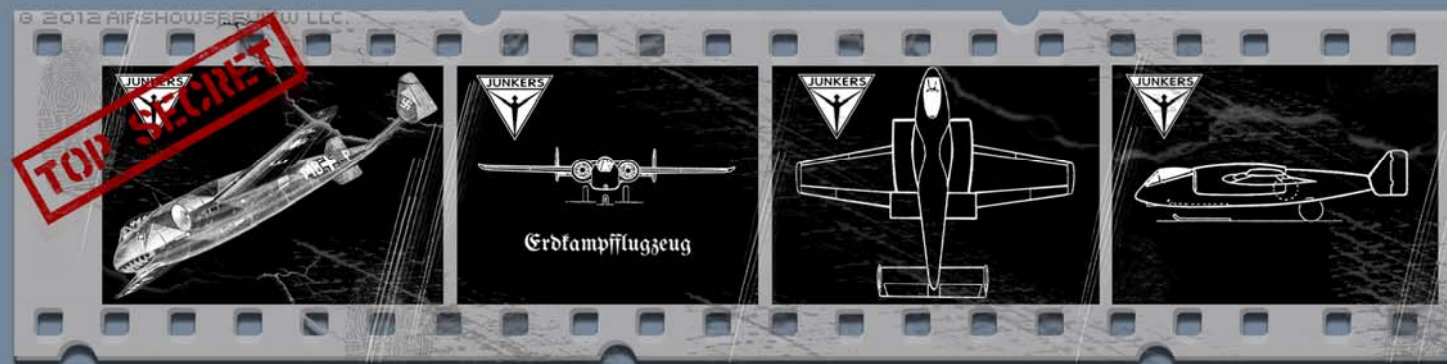
Our first day of visit ended with meeting the 355th FW Historian, Larry Herndon, at the 355th WG HQ around 16:00 hours. We spent time with Larry to learn about the history of the base, as noted in the previous pages.

Our second day's itinerary was quite a busy one. After meeting SSgt. Ruiz and Airmen Slavin, at 08:05 by the main entrance, we proceeded to the 358th FS HQ, where we were met by Major Patrick "Butters" Smiley and Major Kyle "Swat" Lanto. As I wanted to take some photos of Major Lanto, 355th Fighter Wing Heritage flight Pilot, by an A-10, at the same time, we had a chance to get acquainted with the Warthog up close and personal. We were taken to the Lobo Maintenance Hangar (Bldg 5430).



The A-10 is quite an interesting aircraft, to say the least, and here is a brief outline about the development of the best close support aircraft in the current USAF inventory.

The A-10 Thunderbolt II, commonly know as the Warthog or simply the Hog, is the product of the 1966 A-X (attack-Experimental) program. After almost a 4-year design gestation, contracts were awarded at the end of 1970 for two prototypes to be built for evaluation, the YA-10 from Fairchild - Republic and the YA-9 from Northrop. The A-X aircraft program was designed specifically for the close air support role (CAS). In early 1973 the Fairchild-Republic design was announced the winner of the competition.



It is interesting to note the similarities of a nameless Junkers design from the late WWII era, to that of the Fairchild A-10A, which cannot deny its resemblance to the Junkers ground attack aircraft. (See the illustration above for the uncanny resemblance complete with bypass turbojet engines and a 30mm canon in the nose.)

The main characteristic of the A-10 design was the emphasis on survivability, with its two General Electric TF-34 high-bypass turbofan engines mounted on pylons in the upper rear fuselage and its 1,200lb titanium bathtub protecting the pilot from 23mm projectiles. The Hog can carry a vast array of armaments, from general-purpose bombs, laser guided bombs to heat seeking Sidewinder missiles and Maverick missiles. Its main weapon is the General Electric GAU-8/A Avenger 30mm cannon mounted on the nose of the aircraft. A two-seater A-10 N/AW (Night Adverse Weather) version was built but it never went into production.



The A-10's General Electric GAU-8/A Avenger 30mm seven barrel Gatling gun

Its intended field of operations was Europe, where it was supposed to help stop the advance of Soviet tanks coming from the Eastern European countries. The fall of the Berlin Wall in 1989 brought an end to the Cold War. A-10s were introduced to wartime operations in 1991 during Operation Desert Storm as a result of Iraq's invasion of Kuwait, where its reputed survivability was tested in the face of heavy AAA and SAM (surface to air missile) attacks. It flew 9,500 combat sorties during the month long war. Since then, A-10s have seen combat in Kosovo, Afghanistan, Libya and Iraq (during the second Gulf War).

A-10s received many upgrades throughout the years and a second lease on life after its successful performance in the 1991 Gulf War. The current version is the A-10C, introduced in 2007, with new avionics suite, glass cockpit and starting in 2012 newly manufactured wing sets by Boeing, allowing the aircraft to fly until 2040.

Current budget cuts threaten continued operation of the A-10 fleet. The United States Air Force does not have comparable assets to replace the Warthog. There have been plans to have the Lockheed F-35 taking some of the roles of the A-10, which is an unlikely proposition.



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Our photo session for the day started off with SSgt. Ruiz sitting in the A-10 to pose with Major Smiley. Then we followed them in sitting in the cockpit of the A-10C #712 of the 358th FS, Lobos, one by one, as "Swat" explained the controls, and the panels with all those switches and push buttons, that control everything from the flaps to the 30mm gun.



We also talked about the Heritage Flight a bit and also reminisced about the former A-10 West team, and how much they, and all the other ACC demo teams are missed, their impact at air shows, etc. We truly hope that the ACC will bring back the A-10 Demo Team for 2014 and onward in some way. Maybe just as one instead of two: East and West. The demo teams, especially the A-10 Teams were much loved by all the air show attendees!!! We took images of "Swat" in his flight gear in front of one of the typical A-10s that he would fly during a Heritage Demo if there would be one!

Maj. Smiley set up a short meeting for us with Major Eric "Roid" Carlo, 354 FS pilot who had just returned from his OEF* deployment. We talked about Roid's deployment in Afghanistan, what it felt like to fly the A-10 in combat. We learned that he was in 40 combat missions supporting the ground forces and the types of munitions used such as the GBU 38s (500lb bombs). A typical mission lasted about four hours with some extended up to eight hours, and that they did air-to-air refuelling for all missions from either KC-10s or KC-135s. "Roid"'s biggest satisfaction came from "dropping the bombs exactly where the guys on the ground wanted them thus breaking the contact with the enemy".

*Operation ENDURING FREEDOM is the official name used by the U.S. government for the War in Afghanistan.



After our short interview, we proceeded to take photos of Major Eric "Roid" Carlo by an Iraqi T-72 main battle tank that is adjacent to the 354 FS building.



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SSgt J. Post

SSgt. M. Bapp

SrA J. Knerr

SSgt K. Whipple

SSgt C. Aguiniga

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After the interview with "Roid" we returned to the Lobo Maintenance Hangar (Bldg 5430) where the A-10C #712 was parked, in which we sat, and met with the Maintenance crew, who look after the A-10s. We asked them several questions regarding the maintenance of the A-10, what were their specialties and so forth, then proceeded to take some images of them in front of the A-10 in which we had sat earlier inside the hangar. But, we had to hurry as the hangar was about to be used for a pilot graduation ceremony. So, we proceeded to another A-10, for additional images.

We just didn't want a pristine one, like inside the hangar, but one that reflected actual usage, so after some time SSgt. Mark Bapp, succeeded in locating #652 of the 354th FS, Bulldogs, the dirtiest one under one of the sunshades, and our little entourage proceeded for photography.

SSgt. Bapp, the former crew chief of the A-10 West Demo Team, and I met in 2010 at the Scott AFB air show, and reminisced about that particular memorable event when the tire blew on Joe "Rifle" Shetterly's A-10 #238 while landing after the performance on Saturday. Just how much "fun" the A-10 support personnel had in changing the tire that had to be flown in for Sunday's performance.

Time was flying real fast, we proceeded to return to the hangar where the graduation ceremony would start at 1300, on our way for a quick lunch. I noticed a female pilot, Lt. Chandra Fleming, from the 375th FS, and asked her if she would be kind enough to pose in front of the A-10, quickly before the start of the graduation. She did, although not with the proper flight gear. Perhaps next time!

Our itinerary was packed with more activities for us after our lunch including A-10 recovery, A-10 Simulator and a bit more photography of the A-10s in the sunshades. However, just before lunch I wanted to meet 1st Lt. Ruckriegle, 355th Wing Public Affairs Officer, whom I contacted after I was invited by Major Smiley. She was the one who had assigned SSgt. Ruiz to look after our visit, and I wanted to thank her personally. The short meeting was quite successful.



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After we had lunch at Golf Links, an on base restaurant, we were joined by "Butters". After a quick lunch we returned quickly as now I wanted to squeeze in a little bit from the Pilot Graduation too, into our packed itinerary. And why not? We do not see such everyday.

According to Major Smiley, "There were 9 pilots total. Their training was 6 months long. It included 240 hours of academic training, 77 hours of simulator training, and 40 sorties / 83.5 hours of flight training. There are 2 classes per squadron, and there are two squadrons at DM that train A-10 pilots. The 358th FS (Lobos) and the 357th FS (Dragons). The other A-10 squadron on base is the 354th FS (Bulldogs)."

Promptly at 1300 the Pilot Graduation started with a beautiful rendition of the "The Star-Spangled Banner" the American National Anthem, by A1C Emily Baker, followed by a prayer, and presentation. We left during this, since we were now once again late for our next visit the A-10 Simulator.

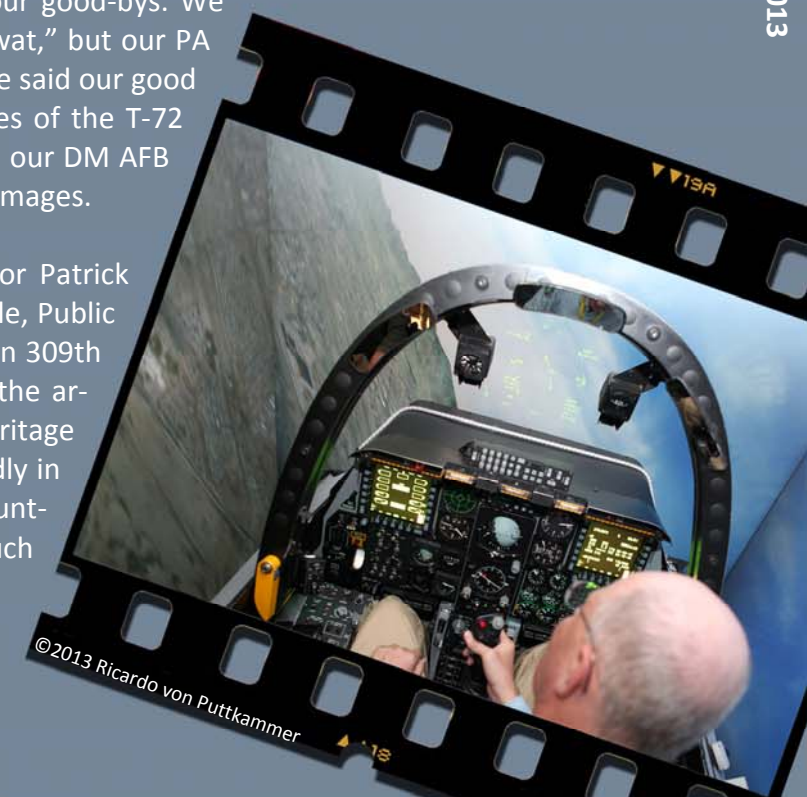
SSgt. Ruiz followed "Butters" and drove us to the simulator building. "Butters" introduced us to Larry Lockett, Simulator Instructor for the program. I sat bravely in the seat of Lockheed Martin Full Mission Trainer simulator's cockpit. The FMT simulator is not a full motion type; it is not mounted on hydraulic struts that move up, down and to the side left or right. However, it is possible to have a 360 degree view, which is enough to get someone not used to fast action motion to get motion sick. Luckily I am not one of them.

The "virtual hog" simulator replicates and mimics the A-10C with fully operational controls including deployment of missiles, bombs and of course firing the 30mm Avenger gun. After sitting in the cockpit of the real A-10C, the virtual hog simulator felt exactly like the real thing. Even to get into one is very similar. Once seated in the cockpit, the pilot is surrounded on all sides by a faint glow emitting from flat displays. After the pilot takes the controls, a full field of vision display illuminates with a vivid landscape of any territory or mission the instructors dial in. I will not get into my flight too much, but we learned that the A-10 cannot take off with just one engine running. However, once both were running it was a breeze to take off with a bit of help from "Butters." A couple of tank targets and buildings were dialed in for me to try the weaponry. It certainly takes skills to line up the gun sight on the target as displayed by the heads up display. Eventually I knocked

off a couple of hostile targets with the 30mm gun and fired my missiles into a building. After my stunt, Ricardo took the seat and he had 30 minutes of enjoyment. We learned that he would make an excellent "kamikaze," and we'll leave it at that. We also learned that two simulators can be flown together for a two-ship mission, as well as hook up and fly with other simulators anywhere in the world, over a distributed mission network. Flying the virtual hog, certainly gave us so much more appreciation for the skills and dedication the hog drivers require! THANK YOU ALL!

After the simulator we drove back to the 358th Squadron's Club room for a bit of refreshments. We met up with "Swat" too. We all had a pleasant conversation about our base visit, and about our impression of this visit and our future plans. "Butters" had to leave for a meeting at 1500 hours, so we took a group photo outside in front of the Lobos crest, just before we said our good-bys. We stayed for another 20 to 30 minutes, chatting with "Swat," but our PA escorts had to return the car soon to the car pool, so we said our good bys to Swat and proceeded to take a few more images of the T-72 tank and of an F-86 mounted on a pole. And with that, our DM AFB visit came to an end. We left with great memories and images.

We would like to thank all the people involved: Major Patrick "Butters" Smiley for his invitation, 1st Lt. Sara Ruckriegle, Public Affairs Officer for the 355th Fighter Wing, Terry Pittman 309th AMARG Public Affairs, SSgt. Angela Ruiz, for making the arrangements, Major Kyle "Swat" Lanto 355 FW A-10 Heritage Pilot, Major Eric "Roid" Carlo for serving the USA proudly in the face of danger and for the interview, and all the countless others who made our visit not only possible but such a memorable one!





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F-86D Sabre

Inside the “Boneyard” 309th AMARG, Tucson, AZ

Article by the Editor with photography as noted



The BONEYARD

Most people who are aircraft enthusiast have heard of this place, seen some snippets of satellite images or by Googling it on the internet, or when in the area visited via a bus tour which is conducted by the nearby Pima Air & Space Museum. It is on the bucket list for many.

We are of course talking about the 309th Aerospace Maintenance and Regeneration Group (309 AMARG) which is a part of the Davis-Monthan Air Force Base proper in Tucson, Arizona. The area of the 309 AMARG that it occupies is gigantic: 2,600-acres (or 4-square-mile (10.4 km²), and it is the largest of its kind in the world.

We had an opportunity to visit the 309 AMARG, as part of our DM visit as noted on page 50 of this issue. This was a rare opportunity, as one can see so much more than from a bus tour, and of course take much better images. To us at The Magazine by AirShowsReview, it was like being a child again and let go in a candy store! Another way to express is like being a child at Christmas and opening up lots of presents, one after another!

So where do we start? Ok, maybe with a bit of history of the 309 AMARG and about their mission.

After World War II, in April 1946, 309 AMARG began as the 4105th Army Air Base Unit. Established by the Army's San Antonio Air Technical Service Command as a storage facility for B-29 bombers and C-47 cargo aircraft at Davis-Monthan AFB. For years it was called the Aerospace Maintenance and Regeneration Center (AMARC). The chief reasons for selecting Davis-Monthan were two fold. The first is well known - Tucson, Arizona's dry climate with minimum of rainfall, low humidity and alkaline soil. These conditions make it possible to store aircraft indefinitely with a minimum of deterioration and corrosion. The second reason was the ground under the site. The ground consists of about six inches of dirt topsoil. Beneath that is a clay-like sub layer often called "caliche." This extremely hard subsoil makes it possible to tow and park the planes in the desert without constructing concrete or steel parking ramps.



In 1964, the Department of Defense designated the Air Force as the single manager for military aircraft storage and named this facility the Military Aircraft Storage and Disposition Center or MASDC. That same year, 998 Navy aircraft were transferred to Davis-Monthan from the Navy aircraft storage depot at Litchfield Park, near Phoenix to make consolidation and the single management concept a reality. In 1973, as the Vietnam conflict wound down, this facility's inventory reached an all-time high of 6,018 aircraft.

In 1985, MASDC (Military Aircraft Storage and Disposition Center) was changed to the Aerospace Maintenance and Regeneration Center (AMARC) with the addition of Hound Dog cruise missiles and later Titan II missiles to the Group's inventory, as well as the Center's growing capability for restoring aircraft to flying status. In May, 2007, AMARC aligned as a Group under the 309th Maintenance Wing at Hill AFB, Utah and became the 309th Aerospace Maintenance and Regeneration Group (309 AMARG).

309 AMARG has grown to include nearly 4,000 aircraft from the Air Force, Navy-Marine Corps, Army, Coast Guard, several aerospace vehicle parts belonging to the National Museum of the USAF and several federal agencies including NASA. With an original purchase price of more than \$35 billion, this aerospace fleet provides a unique savings account from which military units throughout the world may withdraw parts and aircraft. The government earns additional income by selling aircraft to allies of the USA.

The 309 AMARG mission has evolved beyond merely the storage and preservation of aircraft. Today the Group provides customer services including aircraft regeneration (restoring aircraft to flying status), limited depot-level maintenance, and parts reclamation, in addition to its historic storage and disposal functions. But enough of the history, lets get to the aircraft, well there are lots of them!

AMARG is divided into numerous sections or areas which are used for a variety of different purposes as noted above. One of the most popular areas is called the AMARG "Celebrity Row" that is visited by the bus tour from the Pima Air & Space Museum, which holds examples of approximately 60 (subject to change) different aircraft. Some are very rare such as the Boeing YC-14A STOL tactical transport only two built (interestingly enough the other one is located at the Pima Air & Space Museum next door) or the Fairchild T-46A Eaglet only three ever built, while others can be found in abundance such as the Lockheed P-3C Orion, McDonnell Douglas F-15A Eagle or the Grumman E-2C Hawkeye.



Partial aerial view of the "Celebrity Row" showing 51 of the aircraft displayed. ©2011 Courtesy of 309th AMARG

Many of the aircraft stored here are in what AMARG calls "Type 1000" or "inviolable" storage. These are aircraft that could fly again if required. No parts may be removed from an inviolate storage aircraft without direction from the Air Force Air Staff or Navy's Ass't Chief of Naval Operations for Air Warfare. Of AMARG's 4,000 aircraft, less than 400 are stored in Type 1000 storage.

As we were free to wander around with our escort SSgt Ruiz, she warned us about watching out for rattle snakes which could be hiding near or inside aircraft parts. Ricardo actually saw a snake slithering by very close to him.

309 AMARG is a dynamic facility. Aircraft that came to the facility in the mid-1940s are gone, replaced by aircraft from the 50's the 60's up through the modern day. We found several that we could call our favourites such as the **Boeing 747-400F** freighter aircraft that carried the Air Force's high-energy airborne laser, designated the YAL-1A retired into 309 AMARG in February 2012. The Missile Defense Agency (MDA), formerly referred to as the Ballistic Missile Defense Organization, retired the vehicle saying the test bed had completed the key MDA knowledge points. The ALTB demonstrated the viability of a directed energy weapon for missile defense by detection, tracking and destroying in boost phase, representative of foreign ballistic missiles in flight.



U.S.A.F. photo

The **D-21 Drone** was designed as an unmanned, autonomous, ram-jet powered, mach-three reconnaissance aircraft, intended to be launched from a modified version of the Lockheed A-12 Blackbird (later known as the SR-71). Seventeen examples of the once highly classified D-21 drone arrived at 309 AMARG for storage on 15 July 1976; however, only five remain. One of the D-21 drones is located at the Pima Air & Space Museum next door. Another one mounted on the top of an A-12 Blackbird at the Museum of Flight in Seattle.



U.S.A.F. photo

The **SH-60F Seahawk** helicopter with the special livery to honour Lt. Clyde E. Lassen, Congressional Medal of Honor recipient.



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One of the many highlights of our visit was visiting the AMARG Maintenance Shelter. We were allowed to take photos as some of the A-10s were being worked on. There were several other aircraft in various stages of Spraylatting: the taping phase, the black Spraylat phase and the white Spraylat phase.

The other highlight was going inside the hangar where the 309 AMARG team is currently reactivating F-16 Falcons for the Air Force's (Air Combat Command) full-scale aerial target (drone) program. The QF-16 Falcons are replacing the QF-4 Phantoms IIs, as remote controlled targets to be shot down by F-22 fighters and others, in order to give "live kill" expertise skills to the combat ready pilots.

As a final highlight we met "Andy" one of the technicians who had a very rare and interesting history of being sucked into the engine intake of a Marine F-4 Phantom II, and he survived! We took a photo of him in front of the very last QF-4 Phantoms parked outside on the nearby apron under the sun shade.

This rarely granted visit was a real thrill for us, and we wish to thank all the people involved and their hospitality, from Colonel Robert S. Lepper, Commander, Teresa Pittman Business Affairs Liaison, and all the persons involved but especially SSgt. Angele Ruiz Public Affairs for the 355th Fighter Wing as our escort and putting up with the antics of an unnamed individual.



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The F-117 Nighthawk is so good that it is invisible, but if you look hard you can just about see it!!!

C-130 JUST A FEW OF THEM!



F-16 FALCON TAILS

MARTIN EB-57B CANBERRA THE OLDEST AIRCRAFT AT THE BONEYARD



U.S. NAVY EP-3E

QF-106 EXD-01 SEE PHOTO BELOW



NASA photo by Tony Landis

QF-106 DRONE CONVERTED INTO THE PILOTED EXD-01 (ECLIPSE EXPERIMENTAL DEMONSTRATOR-01) EXPERIMENTAL AIRCRAFT



A-10C



B-1B LANDING GEAR



LAST OF THE CENTURY SERIES: F-106 DELTA DART



QF-100F SUPER SABRE



B-1B LANCER TAILS



F-105 THUNDERCHIEF NOSE/COCKPIT



F-101 VOODOO



B-1B LANCER





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VH-34C CHOCTAW served as Army One for President Eisenhower in the days before the Marine Corps assumed sole responsibility for the Presidential Helicopter Service.







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The crew of Clementine Two that rescued the two downed Phantom jet pilots in Vietnam on June 19, 1968. Clockwise from the top left: Pilot LT j.g. Clyde Lassen, Co-pilot LT j.g. LeRoy Cook, gunners ADJ3 Don West and AE2 Bruce Dallas.

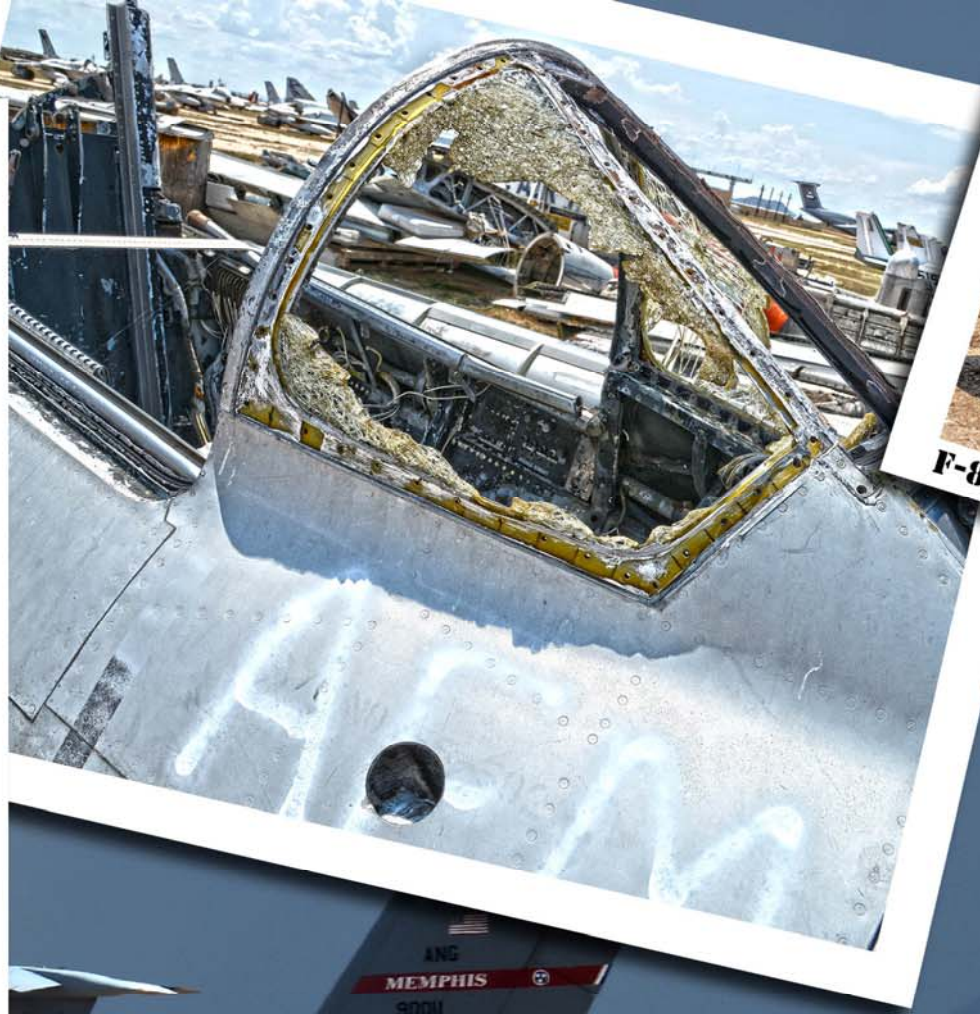
Congressional Medal of Honor
Clyde Everett Lassen

Lieutenant, U.S. Navy, Helicopter Support Squadron 7, Detachment 104, embarked in U.S.S. Preble (DLG-15) Republic of Vietnam, 19 June 1968

For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty as pilot and aircraft commander of a search and rescue helicopter, attached to Helicopter Support Squadron 7, during operations against enemy forces in North Vietnam. Launched shortly after midnight to attempt the rescue of 2 downed aviators. Lt. J.G. Lassen skillfully piloted his aircraft over unknown and hostile terrain to a steep, tree-covered hill on which the survivors had been located. Although enemy fire was being directed at the helicopter, he initially landed in a clear area near the base of the hill, but due to the dense undergrowth, the survivors could not reach the helicopter. With the aid of flare illumination, Lt. Lassen successfully accomplished a hover between 2 trees at the survivors' position. Illumination was abruptly lost as the last of the flares were expended, and the helicopter collided with a tree, commencing a sharp descent. Expertly righting his aircraft and maneuvering clear, Lt. Lassen remained in the area, determined to make another rescue attempt, and encouraged the downed aviators while awaiting resumption of flare illumination. After another unsuccessful, illuminated rescue attempt and with his fuel dangerously low and his aircraft significantly damaged, he launched again and commenced another approach in the face of the continuing enemy opposition. When flare illumination was again lost, Lt. Lassen, fully aware of the dangers in clearly revealing his position to the enemy, turned on his landing lights and completed the landing. On this attempt, the survivors were able to make their way to the helicopter. In route to the coast he encountered and successfully evaded additional hostile anti-aircraft fire and, with fuel for only minutes of flight remaining, landed safely aboard U.S.S. Jouett (DLG-29). Lt. Lassen's extraordinary heroism at the risk of his life, above and beyond the call of duty, are in keeping with the highest traditions of the military service and reflect great credit upon himself, his unit, and the U.S. Navy.

LTJG LeRoy Cook received the Navy Cross; ADJ3 Don West and AE2 Bruce Dallas received the Silver Star

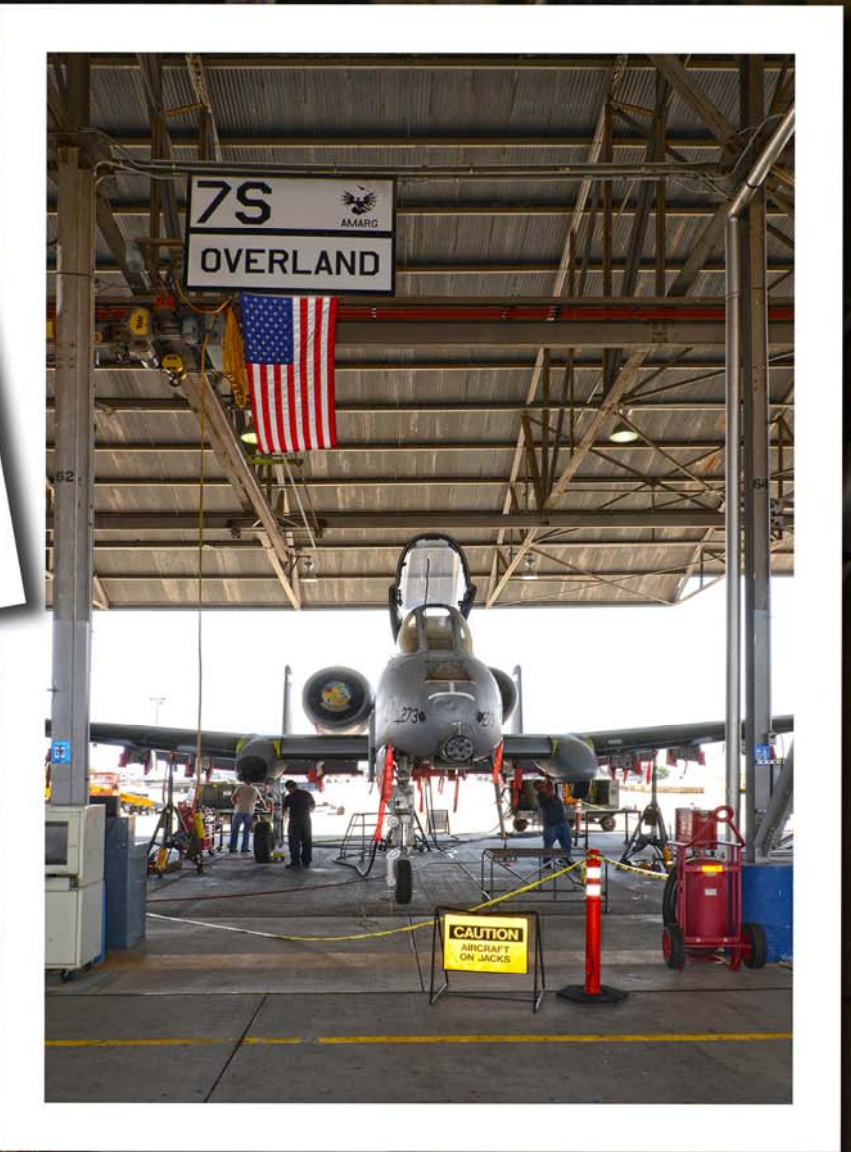
THE STORY BEHIND THE SPECIAL LIVERY ON THE SH-60F



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3
4



7S
OVERLAND



INSIDE THE AMARG REGENERATION BAYS SEVERAL A-10'S WERE WORKED UPON



QF-16 FALCONS AERIAL TARGET (DRONE) CONVERSIONS





ANDY THE F-4 INTAKE SURVIVOR

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A-10 BEING WORKED UPON

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F-14 TOMCAT



B-52 JUST BEFORE A DESERT STORM



BOEING YC-14



MISSILES ON CARRIERS



ENGINES ANYONE?



IT WAS A SUNNY HOT 100F LONG BUT FUN DAY!



LOTS OF TAILLESS JETS LIKE THIS FORMER EL AL BOEING 707 AIRLINER



A FITTING WAY TO END OUR DM AND AMARG VISIT WITH THIS IMAGE FROM ABOVE!

© 2002 John Lasky, Combat Camera, Courtesy of 309th AMARG

The Magazine

BY WWW. AIRSHOWSREVIEW.COM



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



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