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April ♦ May 2012
Volume 3, Issue 3

The Magazine



- ✈ Pima Air & Space Museum, Arizona
- ✈ 2012 Singapore Air Show
- ✈ Canada Aviation and Space Museum, Ottawa
- ✈ RAAF Museum, Point Cook, Australia
- ✈ 2012 RCAF CF-18 Demo aircraft and so much more



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The Magazine
 April - May 2012 Volume 3, Issue 3

Features:

4 PIMA AIR & SPACE MUSEUM

22 **2012 SINGAPORE AIR SHOW**

28  Canada Aviation and Space Museum

35 **PLANES OF FAME VALLE, ARIZONA**

46 Up Close and Personal with the C-17A Globemaster III

53  **RAAF MUSEUM**
 POINT COOK

60 **The 2012 CF-18 Demo**

62 Choctaw in the Vineyards

66 Warbirds on the Space Coast

70 Plane spotting at NAF ElCentro

72 2012 Heritage Flight Conference, D-M AFB

82 In our upcoming issue...

Editorial:

2 Behind the Lens

2 Staff & Contact info



Cover: CONVAIR B-36J PEACEMAKER, Pima Air & Space Museum, AZ, photo by Laszlo Nyary

Index page: F-15C of the Republic of Singapore Air Force, photo by Takeshi Shinoda



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Behind the Lens & to the point

By Laszlo

Welcome to our **Free and green** April – May 2012 on-line issue of *The Magazine* by www.AirShowsReview.com.

In this month's issue, we are covering some long over due museum reviews, from locations in Australia, Canada and the USA we had visited over the past couple of years. The cost of gasoline is going through the roof again, (all kinds of excuses are of course used — most are just that to grab extra dollars) which will have drastic effects on many air show this summer, not just on the actual flying, but on the number of visitors they draw.

We the consumers are getting screwed big time in North America, especially if you live in Canada, considering that we are a major producer of oil. There is truly no reason why we are paying over \$5.00 a gallon (Feb. 28, \$1.30/l in Toronto) except for the greed of oil companies and of course of our governments. The higher the gasoline costs are at the pump, the governments make more money from the taxes. In Canada we are screwed even more, as we are double if not tripled taxed: the pump price already include all the taxes due for the provincial and federal coffers, however we have to pay an added tax on top of everything the HST of 13% in Ontario. Which is nothing more than an extra tax grab on the already taxed gasoline and split by the federal and provincial governments. Due to such high fuel costs unfortunately, we will have to cut back on many of our planned reviews.

If you are interested becoming one of our contributors, have a DSLR camera, located on the West Coast of the USA or Canada, or located in the South-west USA, in Europe, Australia, Japan or Asia feel free to contact us: editor@airshowsreview.com



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IMPORTANT NOTE: *The Magazine* is interactive with invisible hot-links, by hovering over some of the images and advertisements, the cursor changes into a pointing hand and a small window will highlight the destination path to the web site that the reader can visit for further information.

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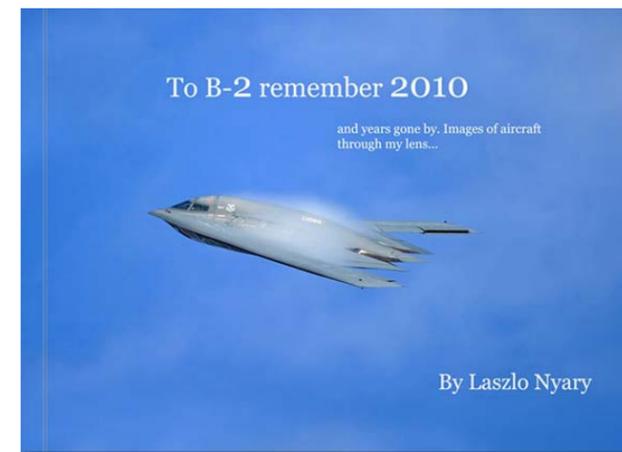


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PIMA AIR & SPACE MUSEUM

Article and all photography by Laszlo Nyary

PIMA AIR & SPACE
MUSEUM

If you are an aviation enthusiasts, like myself, one of the must see places in the world is the Pima Air & Space Museum, located in Tucson, Arizona. It is unlike any other. The Museum is located at 6000 East Valencia Road, Tucson, AZ 85756.

I had the pleasure of visiting this museum several times over the years, and it just gets better and better every time I have visited.

The Museum opened in 1976 with 75 aircraft as part of the America's bicentennial celebration by the Arizona Aerospace Foundation. Today, the 80-acre Pima Air & Space Museum exhibits 300 of the most important aircraft in the history of flight. The Pima Air & Space Museum is one of the largest aviation Museums in the world, and the largest non-government funded aviation Museum in the United States. The size and diversity of the museum's collection is second only to the Smithsonian Institution's National Air and Space Museum collection.

Unlike at many museums, here the visitors can actually touch many of the aircraft on display because there no barriers around them. You will walk among the giants of the aviation heritage, including military, commercial, and civil aviation. Among them on display are: B-17G Flying Fortress, B-24J Liberator, B-29 Superfortress, B-36J Pacemaker, three B-52 Stratofortress, SR-71 Blackbird, and the list just goes on. The Museums collection includes President John F. Kennedy's Air Force One, and presidential aircraft used by president's Nixon and Johnson.

The Museum has five large hangars totaling more than 177,000 feet of exhibit space. In addition, the 390th Bombardment Group (Heavy) Memorial Museum is located on the Museum grounds. Pima Air & Space maintains its own aircraft restoration center, and is also proud to offer exclusive tours of the Aerospace Maintenance and Regeneration Group (AMARG), also known as the "Boneyard," located across the street at Davis-Monthan Air Force Base.

If you are going to visit the Museum, please note that the weather in Arizona is hot and dry. I would estimate that about 75% of the aircraft on display are located outside, unprotected from the glaring sun. For your own protection use adequate sunscreen, and drink plenty of water, wear comfortable walking shoes and a hat. It will take several hours to walk around, in fact plan spending a whole day at the Museum to see all the aircraft on display.

Due to large number of aircraft, I cannot feature all of them in this article, instead I decide to show you some of my favourite aircraft with a brief history about them.





CONVAIR B-36J PEACEMAKER Serial Number: 52-2827
Markings: 95th Bomb Wing, Biggs AFB, El Paso, Texas

The B-36 is the largest bomber and the last piston engine powered bomber produced by the United States. With a wingspan of 230 ft, length of 162 ft 1 in, height of 46 ft 9 inch, it weights in at 410,000 lbs loaded. The maximum speed was 435 mph with a range of 10,000 miles and had a crew of 13.

First designed to meet a World War II requirement for a plane capable of hitting targets in Germany from bases in the United States but the prototype did not fly until August 8, 1946. The development of the atomic bomb led the Air Force to conclude that it still needed a very long-range bomber capable of delivering the bombs over intercontinental ranges and production of the B-36 was continued despite the end of the war a year earlier. A total of 383 Peacemakers were built between 1947 and 1954. The era of piston engine powered bombers was coming to a quick end with the introduction of the all jet B-47 and B-52.

The B-36 was the symbol of American air power in the first years of the Cold War, but even the addition of four jet engines could not bring the B-36 up to the performance standards of the newer aircraft and by 1959 all of the B-36s were out of service.



AVRO SHACKLETON MR MK2

The last flying British Royal Air Force Avro Shackleton AEW2 aircraft (s/n WL790) of No. 8 Squadron, RAF, based at RAF Lossiemouth, Scotland (UK), from 1973 to 1991. Currently is now slowly fading away in the bright sun in Arizona.

The Avro Shackleton was designed with four 2,445 hp Rolls-Royce Griffon V-12 piston engines, with contra-rotating propellers. The design was based on the Lincoln bomber and Tudor airliner, both derivatives of the successful wartime Lancaster heavy bomber. Length: 92 ft 6 in. Wingspan: 119 ft. 10 in. Height: 17 ft 6 in. Crew: 10. Maximum speed: 260 kn (300 mph, 480 km/h) Range: 3660 miles.





FAIREY AEW MK. 3 GANNET

Serial Number: XL482

Registration: N1350X

Markings: Royal Navy, Royal Naval Air Station Lossiemouth, 1978

Designed in response to a 1945 Royal Navy request for a dedicated anti-submarine aircraft the first Gannet flew in 1949, but did not enter service until 1955. The Gannet is widely regarded as one of the least attractive aircraft ever built, however its large fuselage made it ideal for adaptation to other uses. The AEW 3 variant was designed as an airborne early warning aircraft for fleet defense. The addition of the large bulged radar dome under the fuselage did little for the Gannet's looks, but it did give the Royal Navy radar coverage of their fleet out to 200 miles from the aircraft. The other main versions of the Gannet were a trainer and a transport for moving people and cargo to a carrier at sea. The Gannet served with the Royal Navy until 1978 when the British decommissioned their last true aircraft carrier. Wing span 54 ft 4 in. Length 44 ft. Height 16 ft 10 in. Weight 25,000 lbs (loaded). Maximum Speed 271 knots. Range 700 miles. Engine: 1 Armstrong Siddeley Double Mamba 102 turbo shaft 3,875 hp with 2 contra-rotating 4-bladed propeller. Crew 3.





CONVAIR B-58A HUSTLER

Serial Number: 61-2080

Markings: 305th Bombardment Wing, Grissom AFB, Indiana, 1969

The B-58 is the world's first supersonic bomber and the first to reach Mach 2 as well. During its career the B-58 set 19 different speed, altitude, and payload world records, some of which still stand. The Hustler was very technologically advanced for its time and was the first to be built with a stellar inertial navigation system, the first to use stainless steel honeycomb construction, and the first to use encapsulated ejection seats. The B-58 suffered from an unfortunately high accident rate during the first years of its service and this combined with very high operating costs caused only 116 to be built and they were removed from service in 1970, after less than 10 years of operational service. Wingspan 56 ft 10 in. Length 96 ft 9 in. Height 31 ft 9 in. Weight 160,000 lbs (loaded). Maximum Speed 1,385 mph. Service Ceiling 60,000 ft. Range 4,100 miles. Engines 4 General Electric J79-GE-3B turbojets, 15,600 lbs thrust. Crew 3.

Note the missing right front wheel.



LOCKHEED L-049 CONSTELLATION Serial Number: 42-94549 Registration: N90831 Markings: Trans World Airlines, 1950.

The Lockheed Constellation is from the era when air travel was a luxury, airliners catered to the passengers and rewarded them with world class service, unlike what air travel is today! The Connie, and later on the Super-Connie models were widely regarded as one of the best of the post-World War II piston-engine airliners. Originally designed for Trans World Airlines. The Lockheed L-049 Constellation was the first model of the Lockheed Constellation aircraft line. It entered service as the C-69 military transport aircraft during World War II for the United States Army Air Forces and was the first civilian version after the war. After the war it replaced by the improved L-649, the L-749 Constellation, and by The Lockheed L-1049 Super Constellation .



The aircraft was also produced for both the United States Navy and Air Force as transport and AWACS aircraft. Crew: 4 Pilots and 2 to 4 Flight Attendants. Capacity: 60-81 Passengers, Length: 95 ft 3 in. Wingspan: 123 ft Height: 23 ft 8 in .Empty weight: 49,392 lbs. Max. takeoff weight: 86,250 lbs Powerplant: 4 × Wright R-3350-745C18BA-1 radial, 2,200 hp. Cruise speed: 313 mph Range: 3,995 mi w/maximum fuel load.



LOCKHEED SR-71A BLACKBIRD Serial Number: 61-7951. Markings: U.S. Air Force.

The last of a small family of aircraft built by Lockheed's famous Skunk Works, the SR-71 is one of the most recognized aircraft ever built. Design of what would become the Blackbird began in 1958 with a request from the CIA for an aircraft to replace the Lockheed U-2. The aircraft the CIA got was a single seat, twin engine, delta-winged design called the A-12. Even though the other versions of the Blackbird were known publicly the existence of the A-12 remained secret until 1982. The type made its first flight from the Groom Lake, Nevada test site in April 1962. Further development resulted in three different 2 seat versions; the YF-12 interceptor, the M-12 which carried the D-21 drone, and the SR-71

strategic reconnaissance aircraft. Slightly larger than the A-12 and with a longer range the first SR-71 flew in December 1964. In total 50 aircraft in the Blackbird Family were built with 30 of them being SR-71s. It is hard to overstate the technological achievement represented by the Blackbird. It holds world speed and altitude records and is the only manned, jet-powered aircraft to routinely exceed Mach 3. A brief list of some of the records held by the Blackbird: July 28, 1976 - World absolute speed record - 2,193 mph July 28, 1976 - World absolute record for sustained altitude - 85,069 feet September 1, 1974 - New York to London - 1 hour 55 minutes 42 seconds March 6, 1990 - Los Angeles to Washington, D.C. - 1 hour 4 minutes 2 seconds. Wingspan 55 ft 7 in. Length 107 ft 2 in. Height 16ft 6 in. Weight 140,000 lbs (loaded Maximum Speed 2,193 mph + (Mach 3+) Service Ceiling 85,000 ft +. Range 3,200 miles. Engines 2 Pratt & Whitney J-58 turbojets 34,000 lbs thrust each. Crew 2. On loan from the National Museum of the United States Air Force, Wright-Patterson AFB, Ohio.

The photo of the SR-71A, on the right, is from 2003, when it was displayed outdoors along with the D-21 reconnaissance drone.





REPUBLIC F-84F THUNDERSTREAK one of the original USAF Thunderbirds



FOCKE WULF FW 44J STIEGLITZ, 2 seat trainer from 1932.



MIG ALLEY: MIKOYAN-GUREVICH MIG-29 FULCRUM-A, MIG-21PF FISHBED D, MIG-17F FRESCO C, and the MIG-17PF FRESCO D can be seen here, while there are more MiGs on display.



BOEING B-52G STRATOFORTRESS one of the three B-52s the others are: B-52D, NB-52A

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2012 SINGAPORE AIR SHOW

REPORT AND PHOTOGRAPHY BY TAKESHI SHINODA



The Singapore Air show, is one of the largest aerospace and defence events in Asia. This event is a six-day trade show from 14-19 February, with the last two days designated as public day weekend February 18-19.

For the weekend air show 100,000 people attended (according to the local news media, and the show's organizers) to see the display from Republic of Singapore Air Force (RSAF) F-16C and F-15SG, the Royal Malaysian Air Force "Smokey Bandits" consisting of five MIG-29N, the United States Air Force Boeing C-17 Globemaster III and a B-52 flyby, and the Royal Australian Air Force "Roulettes" flying their Pilatus PC-9 . Australian pilot Tony Blair of Blair Aerosports also made his debut appearance in the first stunt aerobatic performance in the history of airshows in Singapore. In addition, visitors had a chance to interact with the aerial display pilots in person during autograph and photo-taking sessions. Singapore Airlines also hosted guided tours on one of their last three remaining Boeing 747-400s, which was here at Singapore Airshow to commemorate the retirement of its B747 fleet.

The overall show was quite poor, due to severe restriction placed upon the show due the International Airport's flight schedule. There were only two time slots allocated daily: one hour long in the morning 11:00 am to 12:00 pm and for 30 minutes at 3:00 pm to 3:30 pm in the afternoon. Such a short venue and spaced so far apart was way below what one can expect at air shows around the globe. The weather overall was bad during the show, dark grey clouds with severe showers, made a very flat background for photography with hardly any contrast. Temperature remained in the 30C (86F) range with high humidity.

The spectator's area was not that great either, the space was limited with no seating areas, even for an extra fee. There was only one bleacher stand for about 200 people at no charge on first come bases. There were sufficient static on display consisting mainly of civilian aircraft such as the Bombardier Q400 CHALLENGER 850, CRJ 1000, and GLOBAL 6000, and the Boeing 787 DREAMLINER. From a military enthusiast point of view it was rather limited, the highlights perhaps were the F-15 and F16 from the Singapore AF and the MIG 29 by Malaysian AF.

Transportation system from Changi Airport Terminal to show ground was very well organized, without any traffic jam and was very smooth.

Considering all, the impression by this reporter, the air show was quite poor. The next show will be in 2014.



The Boeing 787 during the flight display, top left. The Russian Beriev Be-202, Water bomber, above. And the Embraer Legacy 650 Executive Jet with the world-renowned celebrity Jackie Chan livery with his iconic dragon logo below, after the showers.





The F-15 and F-16 of the RSAF crossing over each, above. The F-16 of the Republic of Singapore Air Force on display, below. Tony Blair performing solo aerobatics in his Rebel-300, top right. The RMAF MiG-29N/UB pulling vapour and leaving a trail of smoke too, right bottom.





Canada Aviation and Space Museum

Report and photography by Laszlo Nyary

Photograph courtesy of the Canada Aviation and Space Museum, Ottawa

Canada Aviation and Space Museum is located in Ottawa, not to be confused with the Canadian Air & Space Museum located in Toronto which is currently under the axe, and unlikely to survive.

Canada Aviation and Space Museum is located east of downtown along the Ottawa River Parkway, the Canada Aviation and Space Museum houses one of the world's finest collections of military and civilian aircraft inside its giant hangar-like buildings. There are two buildings; the main building is accessible to the general public during normal visiting hours 9 am to 5 pm, which display 66 aircraft out of the 130 or so in the collection of the Museum, on the above photo is the left triangle shaped.

Visiting the Museum is well worth to admission fee, there are lots of friendly volunteer guides around to answer any questions. The admission fee is currently is \$13.00, please check on the website for further information: <http://www.aviation.technomuses.ca/>



The main building of the Museum on February, 2012, above. A Canadair CT-114 Tutor suspended over the main entrance, below. A replica of the Silver Dart greets the visitors inside the Museum, left below.





The Canadair CL-84 The Canadair CL-84 "Dynavert", designated by the Canadian Forces as the CX-131, was a V/STOL turbine tilt-wing monoplane designed and manufactured by Canadair between 1964 and 1972. Only four of these experimental aircraft were built with three entering flight testing, above. The WWII German Me 163B-1a Komet, rocket powered fighter, below.



The Avro Canada CF-105 Arrow 2 nose, and Lockheed F-104A Starfighter, above. The WWII German Heinkel He 162A-1 Volksjager under the wing of the Avro Lancaster X, below.





The majestic Avro Lancaster X above. The vertical lift section in the museum on the image below left to right are visible: The Canadair CL-84, CH-133 Labrador, Bell HTL-6, Sikorsky HO4S-3, and the Piasecki HUP-3.



The Avro 504K was a World War I 2 seat trainer biplane, above. The AEG G.IV was a biplane bomber aircraft used in the World War I by Germany, below. This example is significant not only as the only one of its kind in existence, but as the only preserved German, twin-engine combat aircraft from World War I.



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PLANES OF FAME VALLE, ARIZONA

Article and photography by Laszlo Nyary

If you happen to be travelling in Arizona, visiting the southern rim of the Grand Canyon, and travelling south towards Williams on highway 64 at the junction of 64 and 180 highways you will find a sleepy little settlement; Valle. You can drive through it in matter of seconds, but if you happen to stop you will be pleasantly surprised there is an excellent private aircraft museum, Planes of Fame, that is well worth the visit and the small admission fee.

The Museum houses over 40 aircraft, many of which are also flyable, and several older vehicles. The Museum is dedicated to the preservation, perpetuation and exhibition of historical aircraft, and to the men and women, both famous and unknown, who devoted their lives to flight. The [Planes of Fame Air Museum](#) is an independently operated, non-profit 501(c)(3) aviation museum with two locations; the above in Valle, Arizona and a much larger operation and more famous located in Chino, California. Sometimes some of the aircraft are rotated between the two, so I have been told by the person at the admission office. The Valle location consists of a large indoor display area and outside yard where some of the aircraft are located among some older aircraft parts.



Douglas RB-26C Invader, above. The Douglas AD-4N Skyraider to the right.

A very rare original Messerschmitt Bf-109G Gustav, below and to the right.





The Messerschmitt Bf-109G Gustav, above. A rare WWI fighter Siemens-Schuckert D. IV to the right. The Grumman G-32A was the last American biplane fighter aircraft delivered to the United States Navy, and served between the wars, below and to the right.





The above Bristol F.2b is a replica of the famous WWI fighter, and also on the right. Outside just behind the main Museum building one can find a Lockheed Shooting Star T-33A with Japanese markings, below and to the right. Note the additional parts of other aircraft stored behind the T-33A.





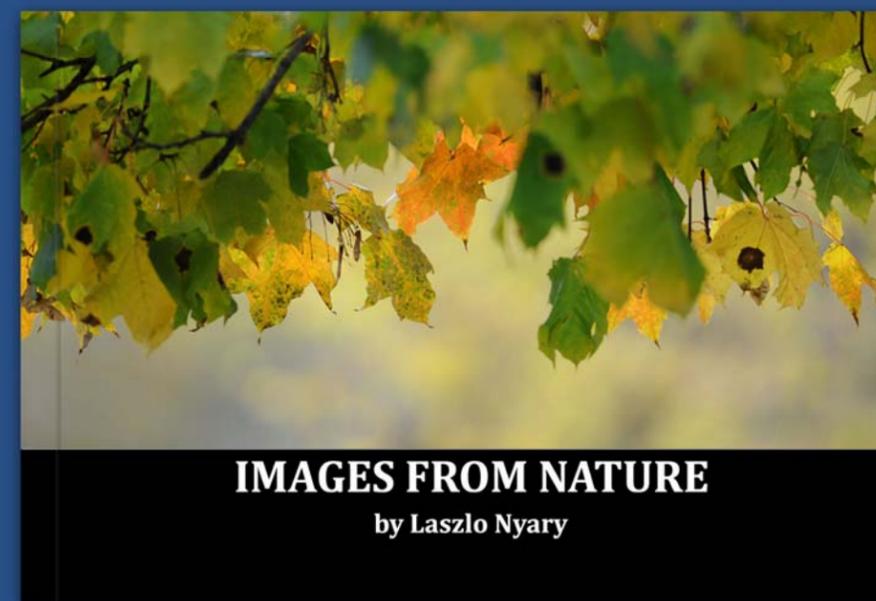
Ex Blue Angel Grumman F11F-1 Tiger long nose, above. Lockheed VC-121A Constellation top right, with a Convair CV-240 in the background and below right. Outside just behind the main Museum building one can find several aircraft in pretty bad shape, like this ex British de Havilland Dh 100 Mk III Vampire, left below. Note the additional parts of other aircraft stored behind the Vampire and other aircraft: Aero L-29 Delhin, Lockheed Shooting Star T-33A and the Republic F84B Thunderjet.





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Up Close and Personal with the C-17A Globemaster III

Article and photography by Dan Adams



It's a fact of life. Air shows around the world promote, and are known for, the flashy and fast jet teams that scream above the crowds. Those sleek and shiny jets are designed to go fast and turn on a dime – amazing the thousands of spectators who crowd the fences during their performances. But when you need to haul more than a pilot and his flight bag, those fighters, no matter how amazing they are, aren't much use. Enter the C-17. Many have seen the big and gray cargo plane sitting in the static area of an air show. Thousands have walked through and around the Globemaster III and gawked at her cavernous interior. However, those that have seen the big aircraft fly its air show demonstration know that looks can be deceiving – this big boy can really haul itself across the sky just like its smaller framed cousins. It is truly a sight to behold in the sky. I was lucky enough to get an exclusive behind-the-scenes tour courtesy of the C-17 Demonstration Team (The Rat Pack), part of the 58th Airlift Squadron based out of Altus Air Force Base in Oklahoma.



Tracing its lineage back to the Douglas C-74 Globemaster and the Douglas C-124 Globemaster II, the C-17 today performs rapid strategic airlift for the U.S. Air Force, as well as tactical airlift, medical evacuation and airdrop missions. First declared operational in 1995, the USAF now operates 232 Globemaster IIIs across the...well, globe. The C-17 is a development of the McDonnell Douglas YC-15 which was a contestant in the USAF Advanced Medium STOL Transport competition. When the competition was expanded to find a replacement for the aging C-141 Starlifter, the C-17 was selected. Overcoming early development problems, the C-17 has enjoyed a remarkable safety record throughout its service life and, aside from the USAF, is now in use by the Royal Air Force, Royal Australian Air Force, Royal Canadian Air Force, NATO and the Qatar Emiri Air Force. The Indian Air Force recently ordered 10 C-17s to replace their aging Ilyushin Il-76s. The C-17 has a crew of three and can carry up to 134 troops and a payload of 170,900 pounds. That can include up to three Strykers or even an M1 Abrams main battle tank. Maximum speed is 515 MPH (Mach 0.76) and unrefueled, the C-17 has a range of 2,420 nautical miles.



Interesting fact: What does the \$218 million C-17 have in common with an exotic supercar that costs over \$2 million? The answer is in the wheels. Bugatti, the company that makes the Bugatti Veyron – the most expensive street-legal car in the world – also makes the wheels of the C-17. Don't believe me? Take a look (with the crew's permission, of course) the next time you're at an air show with a C-17.

Walking around the outside of the aircraft, it is immediately evident that the C-17 is designed for utility. From its high wing, to its 4 Pratt & Whitney F-117-PW-100 turbofans (delivering over 40,000 pounds of thrust each) to the robust landing gear, the aircraft exemplifies its singular purpose: to get troops and material where they need to be, no matter where that is.

The cavernous hold of the aircraft is a far cry from the interior of any commercial or general aviation airplane, although it is climate controlled and does have one toilet. No creature comforts here as every inch of the floor, walls and ceiling are built for maximum efficiency in loading and offloading cargo. The cargo bay is configurable in countless ways to carry every conceivable type of cargo. Finding itself in a niche between the smaller C-130 Hercules and the massive C-5 Galaxy, the C-17 fits the bill as a go anywhere, haul anything workhorse. Moving forward one heads toward the steps that lead to the flight deck. On the forward bulkhead are the toilet and to the left a closet holding the flight crews' parachutes. No ejection seats for the Globemaster III!

Up the steps to the flight deck, there are few luxuries for the crew. While the area seems spacious compared to many aircraft – it begins to feel smaller and smaller the more time spent within its confines. That being said, the excellent visibility and high ceiling in the cockpit give it as airy and spacious a feel as possible. To the rear of the cockpit are two bunks for crew-member rest. In front of the pilots is a modern 'glass' cockpit with multi-function displays running the length of the panel and a heads up display for both pilot and co-pilot.



©2010 Joe Adams



According to her crews, she is a joy to fly and is certainly capable of more than you would expect from such a heavy beast. Remember this the next time you see a C-17 crew putting her through her paces at an air show: Never judge a book by its cover!

Special thanks to Captain Judd Baker of the 58th AS for his invaluable help in getting up close and personal with the C-17 and to Captain Carlos "Slinger" Berdecia, also of the 58th AS for taking me behind the scenes and answering all my questions.



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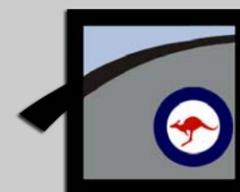
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RAAFMUSEUM

POINT COOK

Article by Ricardo von Puttkammer, photography as noted.

Point Cook Air Force Base, near Melbourne in Australia, houses a very nice museum, with some aircraft types not found anywhere else. Through various galleries and hangars it tells the history of the Royal Australian Air Force with well restored aircraft and memorabilia on display.

A unique feature of this museum is the interactive flying display. Each Tuesday, Thursday and Sunday at 1PM a different aircraft is presented. The program includes a flying display, weather permitting, followed by a questions and answers session with the pilot.

Regular aircraft featured is the CT4A, CAC Winjeel, DH Tiger Moth, CAC Mustang. Other aircraft such as the Pilatus PC-9, is included in the flying display. The program gives a chance for the public to get close to these aircraft in their natural environmental.

The Training Gallery includes a Maurice Farman Shorthorn, Avro 504K, De Havilland Tiger Moth, De Havilland Vampire T M3K, CAC Winjeel, CT4A and Aermachi MB326H. In the Technology Hangar we can find the Supermarine Walrus, SE5A, Douglas Boston, De Havilland Vampire F-30, UH-1B Iroquois and Bristol Bloodhound.

Hangar 180 has the CAC Boomerang, PBY Catalina, GAF Pika, GAF Jindvik, Hawker Demon, Avro Cadet, DH 84 Dragon, CAC Sabre, Dassault Mirage IIIEO, Bell UH-1B and Cessna Birdog.

The Workshop Restoration Hangar is open to the public, giving a rare opportunity to see some of the aircraft in the museum's collection being restored. The newest addition to the museum is the RAAF Strike/Recce Hangar with the F-4E, Canberra and F-111G.

Displayed outside the museum is the C-130A, C-130E, HS748 and Bristol Freighter. The museum also has an F-111C in storage. A8-125 was the first F-111 received by the RAAF in 1973 and the last F-111 in Australian service to perform a landing on December 9, 2010.

A visit to Point Cook is a must if you are visiting Melbourne or attending the Biannual International Air Show in Avalon. It is open Tuesday to Friday 10 AM – 3 PM, weekends 10 AM – 5 PM. The admission is free and there is plenty of parking.



RAAFMUSEUM

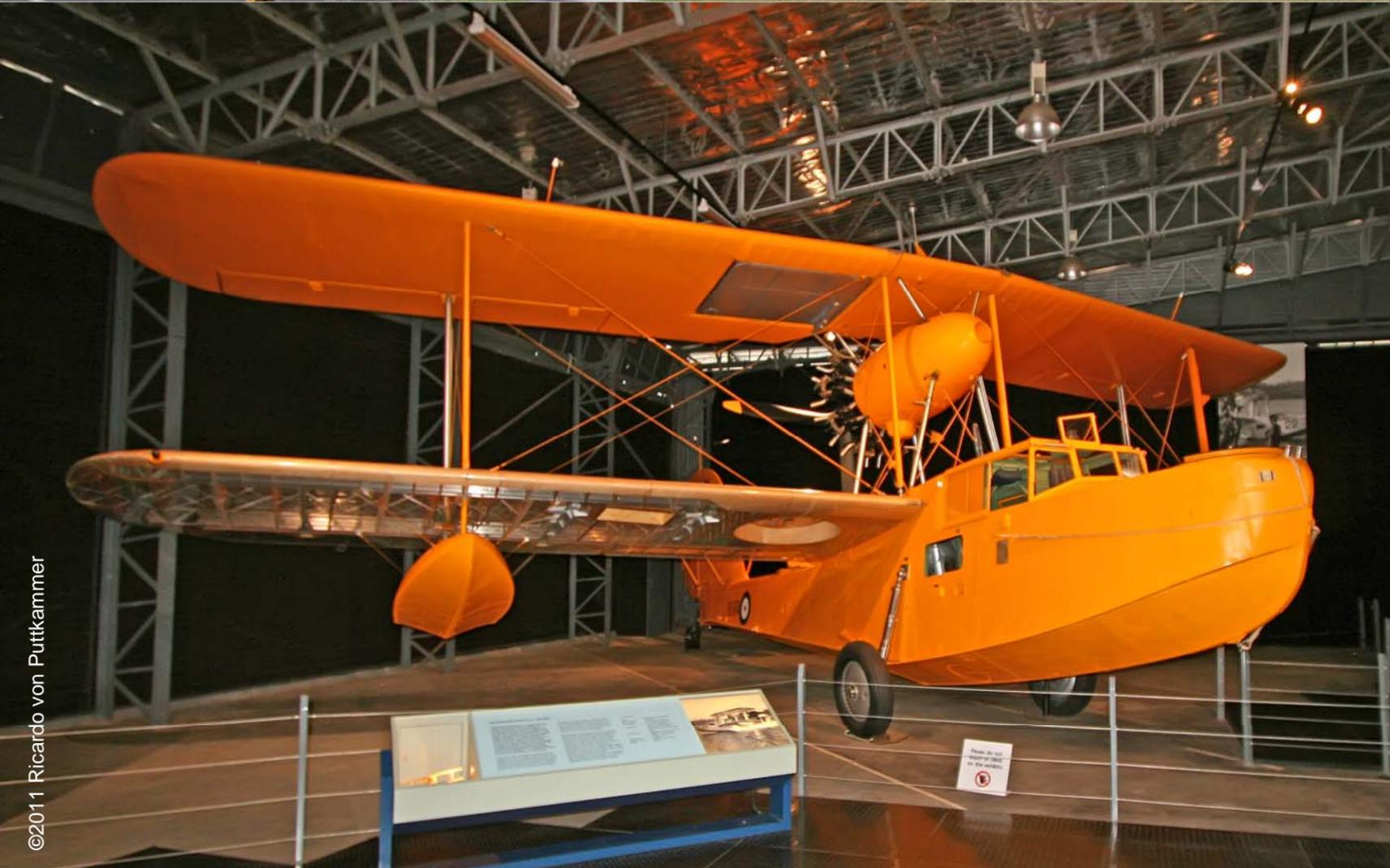
POINT COOK



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The CAC Aermacchi MB-326, top right. The Supermarine Walrus II, bottom left, and CAC CA-25 Winjeel advanced trainer, bottom right.

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The GAF Pika, above, The CAC Aermacchi MB-326 and the de Havilland Vampire T.35 of the former RAAF Telstars Aerobatic Team is on the top right. A Birds eye view of the Hangar 180, bottom left, housing several aircraft among them: GAF Pika, GAF Jindivik, Consolidated Catalina (without wings) Hawker Demon II, Dassault Mirage III and several others.



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The Workshop Restoration Hangar is open to the public, here one can see a Mosquito being restored., bottom right.



RAAF MUSEUM

POINT COOK



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The F-111G, top left, and the CAC-18 Mustang with the CAC F-86 Sabre over the Museum, top right.

The newest addition to the museum is the RAAF Strike/Recce Hangar which houses the F-111G, the F-4E Phantom, and the Canberra whose wingtip is visible only, on the bottom left.

The control tower with a T-28 Trojan, CAC CA-13 Boomerang and P40N Kittyhawk Mk IV are parked ready for flying, bottom right.



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 **RAAFMUSEUM**
POINT COOK



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The 2012 CF-18 Demo

Article by Laszlo Nyary, photography as noted

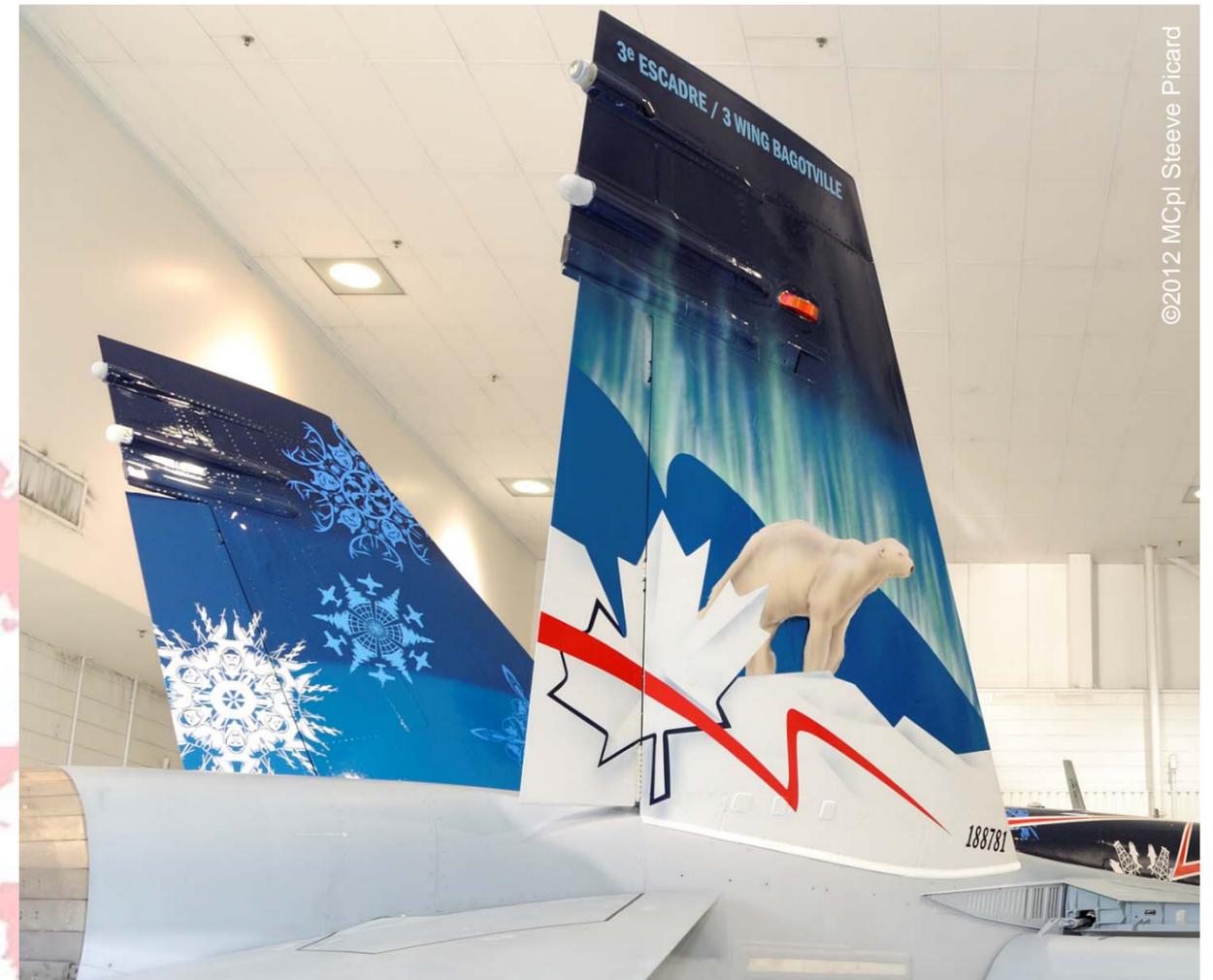
In a small ceremony on March 1st, at 3 Wing, Bagotville, Quebec, the 2012 CF-18 Demonstration Hornet was officially unveiled by Colonel Paul Prévost, wing commander, and Captain Patrick "Paco" Gobeil, the 2012 Demonstration Pilot.

Traditionally each year the CF-18 Demonstration aircraft has unique, one of a kind, paint scheme. Unfortunately, once the season is over, the demonstration aircraft is repainted to its normal standard camouflage paint scheme and is returned to service. Many other aircraft enthusiasts, including myself, would love to see some of these demo aircraft retired outright to a museum, with their beautiful paint schemes intact. However, that is, not an option for the RCAF.

For 2012 the theme is "The True North, Strong and Free". The Arctic theme is timely and relevant, as the defence of Canadian sovereignty and the protection of territorial integrity in the Arctic are a top priority for the Government of Canada and, by extension, to the Royal Canadian Air Force. All anyone has to do is to look at the map of Canada, and they can clearly see that more than one third of Canada is located north of the 60th parallel.

This year's Demo Hornet displays tail and dorsal art capturing the Arctic landscape and its people. It also features 13 distinctive snowflakes – representing Canada's provinces and territories, as well as the 13 RCAF Wings – scattered across a dramatic Arctic blue background. The design was created by Jim Beliveau, veteran graphic design director of 410 Squadron at 4 Wing Cold Lake, Alberta.

Every year before the air show season starts, the CF-18 Demo Aircraft with the entire team will spend the first week of May at the Comox, B.C. AFB, for their annual training. We look forward to see them at airshows in Canada.



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CHOCTAW IN THE VINEYARDS

ARTICLE AND PHOTOGRAPHY BY DAN ADAMS

How a Visit to the Wineries of Long Island Became a Lesson in Aviation History

I'm not one to state the obvious, but let me start off by saying that I am a huge fan of anything aviation related. I think pretty much anyone reading this article shares the same sentiment. I've always been into aviation, but caught the air show bug in earnest in 2008 when I attended one show (Jones Beach, NY). It only got 'worse' from there with 5 shows in 2009, 8 in 2010 and 12 in 2011. That's 26 shows in 4 years. Many of these shows were also attended by my saint of a wife who does not share the same love of aviation, but was kind enough to join me nonetheless. Wanting to show my appreciation with an aviation-free weekend last summer, I decided to take her to the North Fork of New York's Long Island with its many wineries and vineyards, a world away from New York City. Driving through the winding roads and lush fields of the North Fork on a bright, clear day was a pleasant respite from the blasts of afterburner and roar of engines that had marked several air show weekends in the previous months. Even I agreed that it was a nice break from the adrenaline-packed action of an air show and relaxed as we travelled from vineyard to vineyard, sampling some of the best wines in the area.

As we headed to another wine tasting, marveling at the excellent weather, I spied something out of the corner of my eye. Among the rows and rows of grape vines, the weathered barns and stately homes, an olive drab shape caught my attention as suddenly as it disappeared from view. I thought for a second and started to slow the car. "What are you doing?" my wife asked as I started to turn the car around. "You're going to kill me, but I think I saw something back there and I just have to check it out...I think it was a vintage Vietnam-era helicopter," I answered with some trepidation. Always the good sport, she agreed that a slight detour wouldn't be a problem. Heading back toward the area, I began to think that perhaps the hours and hours of baking in the sun at air shows had finally gotten to me. After all, what are the chances that way out here on Long Island, miles from any airport, and sitting out in a vineyard behind a barn, would be a military helicopter. As we reached the house behind which I thought I had seen the helicopter, we turned up the long driveway and moved in closer. And there it was.

Nestled behind a house and between several smaller sheds was a Sikorsky UH-34 Choctaw in perfect condition. And judging from the 'Remove before flight' tags it was in flyable condition. We got out of the car and began to look around. Luckily, one of the volunteers who works with the aircraft was nearby and gave us permission to get inside and really explore the interior and exterior. Still somewhat incredulous to my find, I listened as he told us the history of the aircraft:

Known as Freedom's Flying Memorial, the aircraft is the centerpiece of the Marine Helicopter Squadron 361 Veteran's Association's mission to promote the historical significance and symbolism of the helicopter by serving as a flying educational and awareness museum. Also serving as a physical memorial to those, past and present, who serve in the military, the helicopter, its crew and traveling exhibits have visited over 120 area public and private schools and make appearances at air shows throughout the country.

This particular aircraft YN-19 (BuNo 150570) was built by Sikorsky in 1963 and served in Vietnam with the Marines from 1963 to 1969. Finally, in 1973 the airframe was retired from service and moved to Davis Monthan in the desert of Arizona for storage. There she sat until in 2001, when the Association purchased the stripped shell that used to be YN-19 and returned her via flatbed truck



to New York. Once there, the painstaking work of restoring and making her airworthy again began. Finally, just over 4 years and 20,000 man-hours later, YN-19 took to the skies once more. The aircraft is painted to reflect the scheme it wore in Vietnam while serving with HMM-361 ("Flying Tigers"). BuNo 150570 was among several UH-34s that were modified to carry rocket pods and forward firing fixed machine guns. In that guise, it was known as a "Stinger".

It was luck that brought me to YN-19, but sheer excitement and enthusiasm that kept me there for over an hour looking over the helicopter and asking as many questions as I could think of. Sitting there in the field, with the wind gently buffeting the rotors, I could close my eyes and almost imagine what it must have been like 50 years ago during the quiet before the storm as Marines waited to board this exact aircraft heading into combat.

After checking out every inch and rivet of the aircraft, it was finally time to leave. Fortunately, on two occasions at air shows since then, I have had the privilege of seeing YN-19 fly. The throaty groan of the engine and the noise of the rotors as they slice through the air certainly evoke a different era. She is as much a joy to behold in the air as she is on the ground and is a worthy testament to the persistence and dedication of her crew and supporters. Despite all the amazing things I have seen at air shows over the years, I still shake my head in disbelief over my improbable find that summer day among the vineyards of Long Island.



Warbirds on the Space Coast

The Valiant Air Command Warbird Museum – Titusville, FL

Article and photography by Dan Adams

Every year, millions of people flood Central Florida to visit two tourist attractions that are known throughout the world: Disney World and Kennedy Space Center. However, any visit to the area would not be complete without a visit to a hidden gem of aviation history just a few miles from the Kennedy Space Center itself. The Valiant Air Command (“VAC”) Warbird Museum is located at the Space Coast Regional Airport, just 45 minutes from Orlando and houses an impressive collection of superbly maintained aircraft (flyable and static) and memorabilia, from World War I to the present day.

Established in the late 1970s, the museum’s mission is exemplified by its motto: *To honor the past, educate the future, preserve our heritage.* Throughout its three hangars and associated museum space, the museum does exactly that. The museum’s helpful and knowledgeable volunteers, many veterans themselves, are an invaluable asset to the museum, and an indispensable part of any visit. Upon entering the museum, one has the opportunity to examine the many aviation artifacts housed in the Memorabilia Hall. This includes aviation uniforms dating back to the dawn of aviation, flight gear and personal artifacts that have been donated to the museum.

From the hall, one enters the massive main display hangar. This immaculate space houses a variety of aircraft from World War 2 through the present day. World War 2 aircraft represented include a Grumman Wildcat (recovered from the bottom of Lake Michigan 48 years after crashing there), a B-25 Mitchell and a Messerschmitt Me-208. The Cold War has ample representation which includes an F-9 Panther, a T-80 Shooting Star and an F-86 Sabre Jet that is flyable (and often done so in astounding fashion by none other than aviation legend Dale “Snort” Snodgrass). Aircraft from the modern era of combat aviation include an F-14 Tomcat and an F-18A Hornet that is a former Blue Angels performer. The main hangar also includes a very unusual one-of-a-kind aircraft. Easily noticeable by its elongated nose that resembles that of a pelican, this heavily modified F-5E was a former NASA aircraft that was used by the Defense Advanced Research Projects Agency (DARPA) as part of the Shaped Sonic Boom Demonstration Program. The goal of the two-year program was to attempt to shape, and therefore reduce, sonic booms. Along the sides of the main hangar are many historically significant jet and piston engines.

After the main display hangar, one continues to the

one Vietnam Display Hangar Adorned with a massive United States flag hanging from the ceiling, the hangar houses another impressive collection centered around US involvement in Vietnam during the 1960s and 1970s. From an A-6A Intruder to an F-8K Crusader, the collection covers the fighters and fighter-bomber aircraft that typify that era. A massive F-105 Thunderchief sits across the hall from one of its main adversaries in the air, the MiG-21. Among the other aircraft in the hangar are a A-7 Corsair II, an OV-10 Bronco, an S-2F Tracker and a T-28 Trojan.



To the other side of the main display hangar is the restoration hangar. In this space, the meticulous work of restoring the museum's aircraft and new arrivals takes place. Also housed in this space is the museum's C-47 Skytrain, the Tico Belle, which is the VAC's flagship and is in flyable condition, offering rides for an extra fee. At the time of my visit, the restoration hangar housed a TBM Avenger and an F-4J Phantom

Aside from hosting a world-class aviation collection, the museum also hosts an annual air show attended by thousands who travel from far and wide to take in the sights. This year's show, was on March 9-11, honoring the 70th anniversary of the Doolittle Raiders' bombing raid over Tokyo. In attendance were veterans of the raid and several B-25 Mitchells. Look for in-depth coverage of the show at www.airshowsreview.com and in the next issue of The Magazine.

The VAC museum is open 7 days a week from 9am-5pm (except Thanksgiving, Christmas and New Year's Day). Admission costs \$18.00 for adults, \$15.00 for seniors and military members and \$5.00 for kids aged 4-12. There is ample parking and a well-stocked gift shop.

Whether in the area for vacation, or if you live anywhere nearby, the Valiant Air Command Warbird Museum is a top-tier aviation destination that is not to be missed.



F-86 Sabre Jet, top left. The heavily modified F-5E former NASA DARPA, middle left. The MiG-21U Mongol A trainer with Czechoslovakia markings, bottom left. The Sikorsky UH-19B Chickasaw, bottom right.





CH-47D Chinook, No.7 Squadron RAF, AE ZA675

F-18D Hornet, VFA-106 "Gladiators", NAS Oceana

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F-18A Hornet, VFA-106 "Gladiators", NAS Oceana

AV-8B Harrier II, VMA-513 "Flying Nightmares", MCAS



PHOTOGRAPHY
BY
NORMAN
GRAF



2012 Heritage Flight Conference, Davis-Monthan AFB, Tucson AZ, March 2-4, 2012

Article and photography by Norman A. Graf

Heritage Flights have been inspiring airshow audiences across North America since 1997. Formation flights composed of current military fighter aircraft and warbirds from World War II, Korea and Vietnam present the past and present of the US Air Force. Every year, in early March, Davis-Monthan AFB, in Tucson, Arizona, hosts Air Combat Command's Heritage Flight Conference. This three-day event provides military and civilian pilots the opportunity to train together in preparation for the upcoming airshow season. This year's Heritage Flight program includes eight active duty pilots (five modern fighter pilots and three QF-4 pilots) along with nine civilian warbird pilots.

Five P-51 Mustangs, "Galveston Gal", "Bum Steer", "Live Bait", "Bald Eagle" and "February" were in attendance. An A-36 Apache, the Planes of Fame P-40N Warhawk and Lone Star Flight Museum's P-47D Thunderbolt "Tarheel Hal" rounded out the prop planes from World War II. The Korean War was well represented by three F-86 Sabre jets: FU-012, FU-666 and FU-756 "Hell-er Bust X". Finally, three QF-4E Phantom II drones, painted in the Southeast Asia scheme, represented the Vietnam War-era. F-4 East, tail code TD, was flown alternately by Col Greg "Bluto" Blount and Col Wayne "Holy" Chitmon from the 82nd Aerial Targets Squadron (82 ATRS) based at Tyndall AFB. F-4 West, tail code HD, was flown by Lt Col Patrick "Ichi" Karg, also of the 82 ATRS, but based at Holloman AFB.

Four F-16 Fighting Falcons, three A-10 Thunderbolt IIs, and two F-22 Raptors represented the current ACC aircraft. Missing from the lineup this year was the F-15E Strike Eagle. Viper East, from Shaw AFB, brought two F-16s piloted by Maj Brian "Thorr" Congdon and Viper West brought two F-16s from Hill AFB piloted by Capt Garrett "Mace" Dover. Davis-Monthan AFB, the home base for the A-10 West team, was represented by Maj John "Beercan" Collier, and provided the Thunderbolt II flown by A-10 East pilot Maj Dylan "Habu" Thorpe from Moody AFB. The F-22 Demo Team pilot, Maj Henry "Schadow" Schantz, based at Langley AFB, flew Raptors from Nellis AFB.

The pilots fly two or three sorties per day, beginning with two-ship flights and graduating to four-ship formations over the course of the weekend.



The formal demonstration consists of a "banana" pass from the right, a flat pass from the left, and a flight from behind the crowd with either a split or a cross in front of the flightline, culminating in synchronized aileron rolls. During the practice flights, however, these routines are often repeated with different arrangements of the aircraft, either changing lead or swapping wingmen.

Although ACC is sponsoring only the F-22 single-ship demonstration team for the 2012 airshow season, each of the teams practiced their full routine. These demonstrations of speed, maneuverability and raw power provided an impressive contrast to the grace and beauty of the Heritage Flights.

The Public Affairs Office organized access to the flightline on Friday for visitors with base credentials and accredited media. Although not open to the public, there are numerous vantage points on the perimeter of the base which provide excellent opportunities to view the practice flights.

Additional details regarding Air Combat Command aerial events can be found at: <http://www.acc.af.mil/aerialevents/index.asp>, including the 2012 schedule at <http://www.acc.af.mil/aerialevents/demoteamschedule.asp>.

More information on the civilian aircraft and pilots can be found at the Air Force Heritage Flight Foundation's website at <http://www.airforceheritageflight.org/>.

I would like to thank the 355th Fighter Wing Public Affairs Office, especially Lt Godfrey and TSgt Martin, for arranging the media day, and Airmen Cook and Washburn for their assistance during the event.

2012 ACC Teams and Pilots

Team	Tail Code	Pilot
F-4 East	TD	Lt Col Greg "Bluto" Blount
F-4 East	TD	Lt Col Wayne "Holy" Chitmon
F-4 West	HD	Lt Col Patrick "Ichi" Karg
Viper East	SW	Maj Brian "Thorr" Congdon
Viper West	HL	Capt Garrett "Mace" Dover
A-10 East	FT	Maj Dylan "Habu" Thorpe
A-10 West	DM	Maj John "Beercan" Collier
F-22A	variable	Maj Henry "Schadow" Schantz



P-47D Thunderbolt "Tarheel Hal" piloted by Charlie Hainline and A-10 West DM Maj John "Beercan" Collier



Page 74 Warbird lineup: A-36 Apache, P-51 Mustangs, P-40N Warhawk & P-47D Thunderbolt



Steve Hinton in the P-40N Warhawk Page 75





Preparing the Raptor for flight.



From left to right: P-40N piloted by Steve Hinton, P-51D "Live Bait" with Vlado Lench, QF-4E F-4 West with Lt Col Patrick "Ichi" Karg and the F-22A piloted by Maj Henry "Schadow" Schantz.



Lt Col Patrick "Ichi" Karg (on the left) and Lee Lauderback discussing the flight.



- The QF-4E F-4 West piloted by Lt Col Patrick "Ichi" Karg about to land top left.
- F-16C Viper East SW piloted by Maj Brian "Thorr" Congdon, top middle.
- A rare sight three QF-4E Phantom II drones from 82 ATRS, Tyndall and Holloman AFB, bottom left.
- Steve Hinton rolling out in F-86 Sabre "Hell-er Bust X", right.



IN THE UPCOMING ISSUE

We will be reviewing the following air show and several others in the next issue of *The Magazine* by AirShowsReview:

- NAF EICentro Air Show
- TICO Warbird Air Show
- Yuma Air Show
- Flying in the Red Bull DC-6

Be sure to visit us on our website at www.AirShowsReview.com for our latest reviews, and to plan your 2012 air show season.

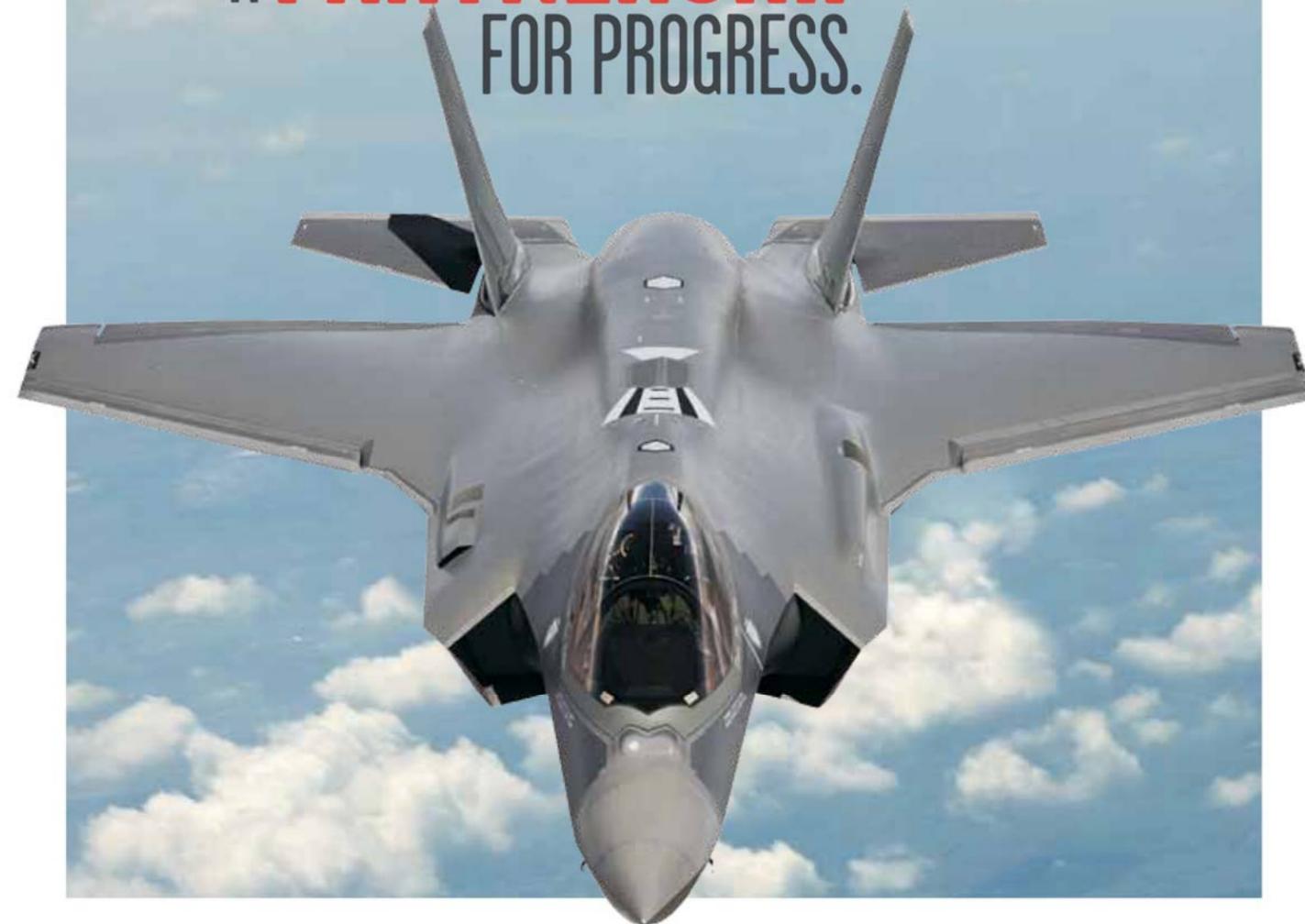


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