

THE AVIATION MAGAZINE

www.TheAviationMagazine.com

Nº 61 January-February 2019
Volume 10, Issue 1



- ➡ **NAS Whidbey Island, USA**
- ➡ **Mach Loop - Low Flying in Wales, UK**
- ➡ **MCAS Miramar Airshow, USA**
- ➡ **NATO Exercise TRIDENT JUNCTURE, Norway**
- ➡ **State Emergency Service of Ukraine, Nizhyn AB**
- ➡ **And so much more ...**

THE AVIATION MAGAZINE

www.TheAviationMagazine.com

Nº 61 January-February 2019
Volume 10, Issue 1

Content

- 6 Naval Air Station Whidbey Island, WA, USA
- 20 Festa al Cel Airshow, Lérida, Spain
- 30 Mach Loop - Low Flying in Wales, UK
- 40 Marine Corps Air Station Miramar Airshow, CA, USA
- 52 NATO Exercise TRIDENT JUNCTURE, Bodø, Norway
- 62 Warbirds Downunder, Temora Airport, Australia
- 72 State Emergency Service of Ukraine, Nizhyn AB, Ukraine
- 80 San Francisco Fleet Week Airshow, CA, USA
- 90 Military Movements at Stuttgart Int'l Airport, Germany
- 98 Armed Forces Day at Wunstorf AB, Germany

Cover: P-3 Orion on the flightline at NAS Whidbey Island, © 2018 Ralf Peter Walter

This page: T-33 performing a low pass at the San Francisco Fleet Week, © 2018 Geoffrey Arnwine



© 2019 THE AVIATION MAGAZINE



THE AVIATION MAGAZINE

by www.TheAviationMagazine.com

e-mail: editor@TheAviationMagazine.com

THE AVIATION MAGAZINE is published six times a year, by a Team of Volunteers interested in aviation. We are devoted to cover a wide range of aviation events ranging from air shows, air base visits, military exercises, civilian spotting, pilot and veteran interviews all with exceptional photography. THE AVIATION MAGAZINE is a leader in the e-magazine format since 2009, bringing exclusive and fascinating reports to our global aviation enthusiasts digitally.

Please note: we do not accept any unsolicited articles or images for publication. However, we are very interested in publishing your work, so feel free to send us an e-mail to editor@TheAviationMagazine.com.

The people behind THE AVIATION MAGAZINE

Publisher & Editor

Ralf Peter Walter
editor@TheAviationMagazine.com

Contributing team members

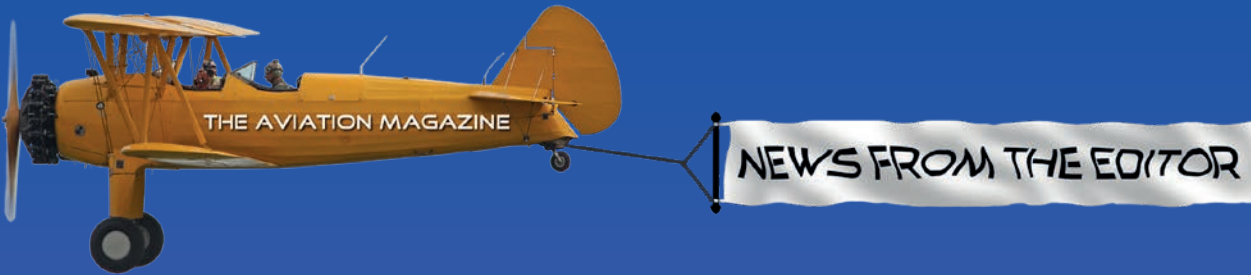
Geoffrey Arnwine
Joe Cilberti
Wolfgang Jarisch
Peter Thivessen
Jeroen Oude Wolbers

Occasional contributors

Paco Jover
Mathias Leischner
Udo Leischner
Felix Mayer
Tommaso Munforti
Jason Phelan
Anthony F. Seychell

Copyright ©2019 THE AVIATION MAGAZINE.

No part of this e-publication may be reproduced in any form without the prior written consent from the publisher. Copies of THE AVIATION MAGAZINE may not be sold. However, you are free to distribute a link to our website. While we strive for factual reporting of events. THE AVIATION MAGAZINE is not responsible for the accuracy of the content or for the opinions expressed by authors of their respective articles and reports and are not necessarily those of the editor or publisher. All trade names, trademarks, manufacturer names, photographic images and textual works used in this publication, are the property of their respective owners.



At the end of 2018, I took over THE AVIATION MAGAZINE from Laszlo Nyary. I am very happy about this and also very proud to be able to continue one of the most widely distributed aviation magazines freely available on the internet for the tenth year now.

Today's issue once again shows the wide range THE AVIATION MAGAZINE covers: reports from air shows in the USA, Europe and Australia, a visit to the U.S. Naval Air Station Whidbey Island and the largest NATO exercise of the year, Trident Juncture, in Norway. An extraordinary perspective on airplanes is offered in the hills of Wales, when jets and propeller airplanes chase through the valley at low altitude. No less interesting is the report about the State Emergency Service of Ukraine.

The the next issue will include a report on CRUZEX 2018 in Brazil and a visit to the Swiss Air Force at Meiringen AB and the TLG 74 (74th FW) of the German Air Force at Neuburg AB.

Thank you very much for reading and downloading THE AVIATION MAGAZINE and have a good start into 2019.

Ralf Peter WALTER
Editor & Publisher

This and all previous issues are also available for download at the issuu platform at <https://issuu.com/theaviationmagazine>





NAVAL AIR STATION WHIDBEY ISLAND

ARTICLE AND PHOTOGRAPHY BY RALF PETER WALTER



Naval Air Station Whidbey Island is the U.S. Navy's largest air station in the Pacific Northwest. It is located in the Puget Sound, about 1 ½ hour's drive north of Seattle. NAS Whidbey Island is home to two major commands:

Commander Patrol and Reconnaissance Wing 10 (CPRW 10)

CPRW 10 commands four Maritime Patrol Squadrons (VP), equipped with the Lockheed P-3C *Orion* and/or Boeing P-8A *Poseidon* and the Fleet Air Reconnaissance Squadron VP-1

with the Lockheed EP-3E ARIES II (Airborne Reconnaissance Integrated Electronic System II). A VP squadron's missions include undersea warfare, anti-surface warfare, mining, reconnaissance, surveillance, search and rescue and counter-drug operations. VP-1 conducts signals intelligence, surveillance and reconnaissance missions and provides fleet and theater commanders worldwide with near real-time SIGINT (signals intelligence) and full motion video intelligence IMINT (imagery intelligence).

Commander Electronic Attack Wing U.S. Pacific Fleet (COMVAQWINGPAC)

With twelve operational Squadrons and one USN Reserve squadron – VAQ-209 Vikings – belonging to the Tactical Support Wing at Naval Air Station Joint Reserve Base Fort Worth the majority of the Navy's electronic attack squadrons (VAQ) are based at Whidbey Island.

Each operational squadron typically has four Boeing EA-18G *Growler* aircraft assigned and averages 30 officers and 170 enlisted personnel. VAQ-129 is the EA-18G Fleet Replenishment and

a non-deploying shore squadron. VAQ-129 trains both pilots and flight officers who are new to the *Growler* and who have been with the fleet. They also develop standard operating procedures for the operation and maintenance of the *Growler*.

Other units at NAS Whidbey Island are:

Base Flight

The base flight consists of two Sikorsky SH-60S Knighthawk helicopters. Their mission is to perform Search and Rescue (SAR) for aircraft

and personnel stationed at NAS Whidbey Island. However, they also respond to non-military emergencies in close cooperation with civil agencies. Their crews are highly trained in overwater and mountain SAR missions.

Fleet Logistics Support Squadron VR-61 Islander
VR-61 is one of four Navy Reserve squadrons that flies the McDonnell Douglas C-9B Skytrain II. Its mission is to provide worldwide transport of cargo and passengers. VR-61 currently operates four C-9Bs.

390th Electronic Combat Squadron, U.S. Air Force
The 390th ECS Wild Boars is a tenant unit of the 366th Fighter Wing at Mountain Home AFB, Idaho. The squadron is flying the EA-18G. Usually the Air Force employs their electronic equipment to jam electronic pods that protect enemy aircraft against missiles. With the Growler, the Air Force is capable to offensively use the aircraft’s electronic equipment to suppress the enemy’s capabilities to launch missiles against the approaching strike force.



Squadrons of Patrol and
Reconnaissance Wing 10

- VP-1 *Screaming Eagles*
- VP-4 *Skinny Dragons*
- VP-9 *Golden Eagles*
- VP-40 *Fighting Marlins*
- VP-46 *Grey Knights*
- VP-47 *Golden Swordsmen*
- VQ-1 *World Watchers*



EP-3E ARIES II of
VQ-1 "World Watchers"





P-3C BMUP+ of VP-69 *Fighting Totems*,
U.S. Navy Reserve Squadron, left and above

P-3C BMUP+ of VP-40 *Fighting Marlins*,
with Littoral Surveillance Radar System
(LSRS) pod known as AN/APS-149, below



P-3C AIP of VP-46 *Grey Knights*
below left





SH-60S of the Baseflight
used for Search and Rescue
(below)

Flightline with P-3C Orion
and P-8A Poseidon (above)



C-9B of VR-56 *Islander*
(below)





P-8A of VP-9 *Fighting Totems*, above and below



This P-8A belongs to VP-30 *Pro's Nest*, based at NAS Jacksonville. As the U.S. Navy's P-8 Fleet Replacement Squadron they are frequent visitors to NAS Whidbey Island, above



P-8A of VP-47 *Golden Swordsmen*, below



Squadrons of Electronic Attack
Wing U.S. Pacific Fleet

- VAQ-129 *Vikings*
- VAQ-130 *Zappers*
- VAQ-131 *Lancers*
- VAQ-132 *Scorpions*
- VAQ-133 *Wizards*
- VAQ-134 *Garudas*
- VAQ-135 *Black Ravens*
- VAQ-136 *Gauntlets*
- VAQ-137 *Rooks*
- VAQ-138 *Yellow Jackets*
- VAQ-139 *Cougars*
- VAQ-140 *Patriots*
- VAQ-141 *Shadow Hawks*
- VAQ-142 *Gray Wolves*

The Aviation Magazine would like to thank Mr. Mike Welding and Mr. Thomas Mills of the NAS Whidbey Island Public Affairs Office for their hospitality and for making this report possible.



EA-18G of VAQ-134 *Garudas*
(left)



EA-18G of VAQ-209 *Star Warriors*,
U.S. Navy Reserve Squadron
(bottom left)



EA-18G of VAQ-142 *Gray Wolves*
(below)





FESTA AL CEL '18

Article and photography by Paco Jover



Festival in the Sky (Festa al Cel) is the oldest airshow celebrated in Spain. The 2018 edition was the 25th and it took place during the weekend of September 22nd and 23rd at Lérida airport, 175 km away from the city of Barcelona. Before Lérida airport, it was held for two years at Mataró seaside, north of Barcelona, and the others at the beaches of Barcelona.

On Saturday morning, there was a static exhibition. Flying display was on Saturday afternoon and Sunday morning. The display was very special at sunset due to the combination of aircraft, trails and sunset lights.

The event was well-organized with parking areas, VIP zone, merchandising, food and playground areas. The three Spanish services (Air Force, Navy and Army) had an important participation in the airshow.

Military aircraft

The Spanish Navy was present with the AV8-B Harrier II showing its capability for vertical and static flying. There were two planes and during Sunday flights they participated in an aerial photography session.

The Spanish Army displayed two helicopters, a CH-47 Chinook and the newest Eurocopter EC665 Tiger. The Chinook carried a jeep as external load, showing its loading and transport capabilities.

The most important participant was the Spanish Air Force with a Canadair CL-215T, F-18 Hornet, the parachutist team PAPEA and the aerobatic display team Patrulla Águila (Eagle Patrol).

The Patrulla Águila is based at San Javier air base at the location of the Air Force Academy. The displaying pilots are instructors. The team flies with seven Spanish CASA C-101 Aviojet,

an advanced two-seat trainer with a single engine. The Patrulla Águila is especially known for its formation landings. During the Sunday exhibition, their display was amazing due to the sunset lighting and the aerobatic, smoke-on, manoeuvres.

Aerobatics

Two Spanish champions were in the airshow flying schedule:

Cástor Fantoba is an aerobatic pilot, aeronautical engineer and flying instructor. He is the current Spanish unlimited aerobatics champion and he had several achievements in the World and European category (FAI competitions). He flew with the Sukhoi SU-31M, powered by a nine-cylinder radial engine (Vedeneyev M14PF) with 400 hp.

Juan Velarde is a pilot of the Red Bull Air Race championship and participated with the Extra 330LX.

Warbirds

The OV-10B Bronco belonging to European Fighter Aircraft Museum and based at Montelimar in France impressed the public with closed turns and low passes. The plane is painted with desert camouflage and U.S. Marine Corps markings. It was the first participation of the Bronco in the Spanish airshow.

Paragliding, planes of the Barcelona-Sabadell Aero Club fleet (Cessna 182T, Tecnam P-2006T and Zlin Z-50) and some vintage airplanes: Bücker Jungmann, Dornier Do-27, Beechcraft T-34 Mentor and the military jet Hispano Aviación HA-220 Súper Saeta completed the airshow's flying schedule.





- Eurocopter 665 Tiger HAD (main image and inset top left)
- CH-47D Chinook (inset left)



- EAV-8B Harrier (main image)
- EF-18M Hornet (inset right)
- CASA C295M (inset left)



- Grob G-109B Vigilant T1 (main image)
- Sukhoi Su-26M (inset top left)
- Dornier Do-27 (inset top right)
- Tecnam P-2006T & Cessna 182T (inset middle right)
- Bucker Bü 131 Jungmann (inset bottom right)



Canadair CL-215T



OV-10B Bronco



T-34 Mentor



Hispano Aviacion HA-220 Super Saeta



Zlin Z.50-LS

GO LOW Low-flying in Wales

Article and photography by Mathias Leischner

In contrast to most other NATO air forces, the Royal Air Force (RAF) still considers tactical low flying as a central task to be fulfilled by its aerial forces. Avoiding enemy radar detection and being able to deploy weapons from low altitudes still remains an important task for its pilots and crews. Therefore, regular training is necessary to enable crews to effectively fly low-level missions.

Different "low flying areas" (LFAs) are available in the United Kingdom (UK). No less than 18 LFAs cover the whole of the UK (LFA 1 to LFA 19 – LFA 15 does not exist). LFA 7 in Wales is one of the most used and also the most known to aviation enthusiasts! LFA 14 in the north of Scotland and LFA 17 in the Lake District are also often used training areas.

The most spectacular part of LFA 7 (covering the most part of Wales) is often referred to as "the loop" as it is a series of valleys forming a nearly round shape (loop). It is also known as "Mach loop" as of its close proximity to the Welsh town Machynlleth.

It offers great possibilities for both the aircrews and photographers or spectators.

There are quite a few spots where it is possible to watch fast jets going low level, sometimes literally underneath you!

A great range of Aircraft can be seen in the loop consisting of most active RAF aircraft. Other services such as the Royal Army, Royal Navy and as well USAF aircraft can also be seen regularly. During times of exercises or deployments, and even close around UK airshows, visitors from other countries also take advantage of these excellent training opportunities.

Aircraft are allowed to operate as low as 250 feet. In some regions (LFA 7T), and only during

dedicated times, aircraft are also being allowed to go as low as 100 feet. However, this requires both excellent skills and regular training from the pilots!

One would believe that LFA 7 is mostly used by fighter jets, but aside that they may be the most numerous species down there. Helicopters, trainers and also cargo aircraft can regularly be seen. A C-130 Hercules or A400M Atlas going "knife-edge like" through the loop is something extremely exciting to witness!

Since the arrival of MV-22 Ospreys in RAF Mildenhall as part of the Air Force Special Operation Command (AFSOC), they can also be seen in the loop from time to time as the nature of their operations requires exactly the skills being trained down there.

The photos were all taken at the "Cad West" on different days during August 2018.



F-15E, 492 Fighter Squadron, USAF



Typhoon T3, 3(F) Squadron, RAF





- F-15E of 492 Fighter Squadron, USAF (main image)
- Tornado GR4, IX(B) Squadron, RAF (inset)



Atlas C1, 24/70 Squadron, RAF



- Tucano T1, 72 Squadron, RAF (main image)
- Hercules C5, 24/70 Squadron, RAF (left)
- Chinook HC6A, RAF (right)





MCAS Miramar Air Show 2018

Article and photography by Geoffrey Arnwine



The 2018 MCAS Miramar Airshow took place on September 28-30 celebrating 100 years of women in the U.S. Marine Corps. Headlining the show was a variety of performers including the U.S. Navy Blue Angels aerobatic team, the F-35B Lightning II and the Marine Air Ground Task Force known as the MAGTF. Unlike previous years, this year's show was arranged differently with grandstands and other seating options switched to opposite sides of the ramp as compared to the past. This was due to the construction plans for new hangars to be built for the F-35s which will be station at the base in the future.



Gates opened to the general public at 8:00am and spectators were able to visit multiple static aircraft and other displays on the ground as well as a variety of early morning aerial performances. Among those morning performers included John Collver in the SNJ Texan known as "War Dog", Kent Pietsch in his Jelly Belly Interstate Cadet, Jacquie B in her Extra 300, Jon Melby in his Hangar 24 Pitts, Steve Stavrakakis in his Romanian IAR-823 known as "Wild Thing", the Shockwave Jet Truck, and Powered Paraglider Flight Team.

Towards the later morning hours, the show featured some new performances that have not been featured at Miramar in a while. Those included a rare demonstration by the Lockheed U-2 Dragon Lady based out of Beale Air Force Base, a single ship demo of a Miramar based MV-22 Osprey and a WWII warbird reenactment with a P-51 Mustang, FM-2 Wildcat, T-28 Trojan and T-6 Texan featuring pyrotechnics.



Opening ceremonies kicked off at noon with the singing of the National Anthem. During the anthem, the U.S. Army Golden Knights and U.S. Navy Leap Frogs parachute teams jumped with the flags of the United States and other military branches while aboard the Blue Angels' C-130 Hercules transport plane known as Fat Albert. This marked Fat Albert's first appearance at Miramar in three years since multiple maintenance issues have grounded the aircraft from performing at recent airshows.

The show continued with a bang by featuring the popular Miramar Airshow demonstration known as the Marine Air Ground Task Force (MAGTF). The MAGTF is a simulated air-to-ground Marine



tactical demonstration which features many aircraft and ground forces depicting an actual battle situation. The demonstration featured many attack runs by F/A-18 Hornets and AV-8B Harrier II's, close air support and ground troop deployment by helicopters including the MV-22 Osprey, AH-1Z Viper, and UH-1Y Venom, and aerial refueling by a KC-130 Hercules.

One of the major aerial highlights was the Lockheed Martin F-35B Lightning II STOVL stealth multirole fighter. The F-35B is the newest fighter in the U.S. Marine Corps inventory and is scheduled to replace the aging F/A-18 and AV-8B fighter aircraft in the near future. The demonstration flown by VMFA-122 known as the "Fighting Leathernecks", showcased the



MV-22B Osprey



UH-1Y Venom

incredible tactical maneuvers and hovering capabilities of the aircraft.

Coming towards the end of the show was the final Miramar solo performance by Sean D. Tucker. Sean Tucker is one of the most renowned aerobatic airshow performers in the world and thrills audiences in his Oracle Challenger II biplane. This year will mark his final airshow season doing solo aerobatics before he transitions to a display team featuring multiple aircraft. Sean concluded his aerial routine by performing the breathtaking ribbon cut near the end of the runway.

Concluding aerial activities was the United States Navy aerial demonstration squadron known as the Blue Angels. The Blue Angels are always

a crowd pleaser at Miramar and showcase the precision maneuvers that all Navy and Marine Corps aviators are trained in. Their performance included multiple formations, solo opposing passes and formation breaks. At the end of their demonstration, the team walked over to the crowd line where they had the opportunity to meet fans and sign autographs.

After the Blue Angels ended their routine, spectators were able to visit the many static displays offered on the ground before gates closed at 5:00 pm.

Special thanks to the men and women of Miramar, sponsors, attendees, performers, volunteers, and organizers for making this year's show a success!



KC-130J Hercules



OVER WING VAPOR

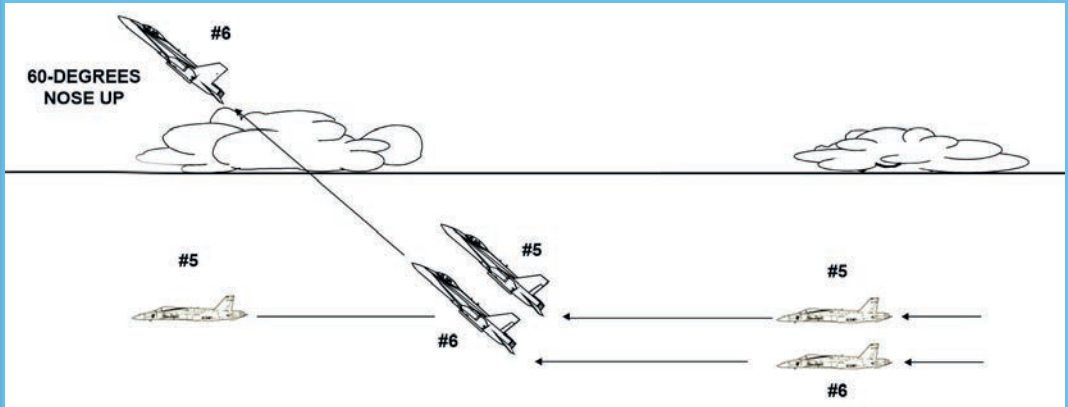
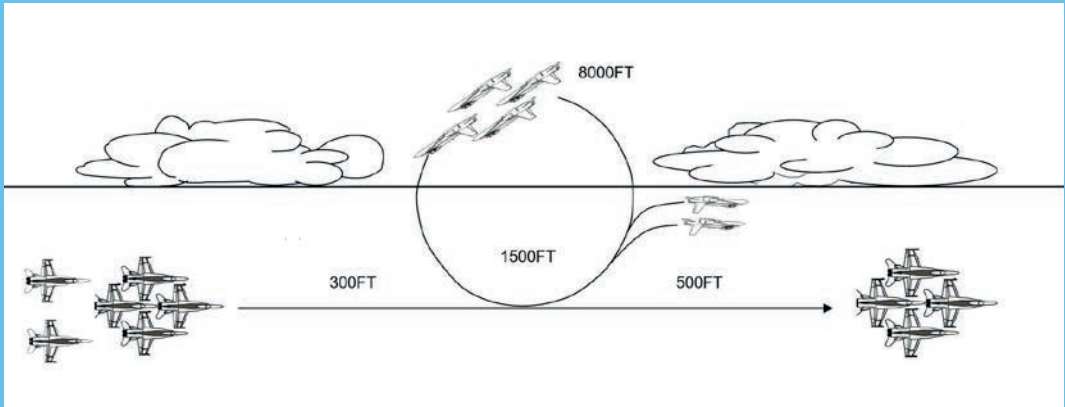
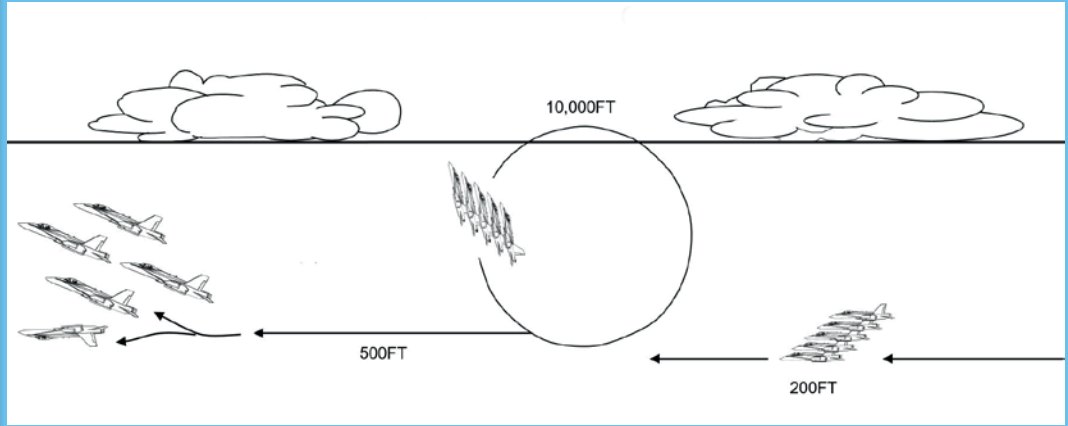
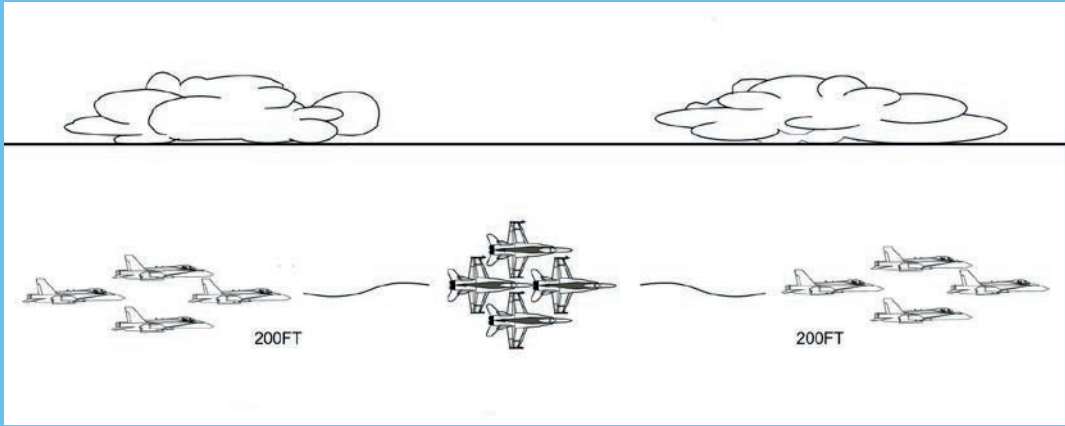
An aircraft's wing makes the air over the wing moving faster than the ambient air. As a consequence, the pressure of the air decreases. A pressure drop goes along with a drop of the air's temperature. If this temperature decreases below the dewpoint, the water contained in the air condensates and then is visible as over wing vapor.

VAPOR CONE

An aircraft flying at high or at transonic speed has areas, where the air flow is supersonic, while others remain subsonic. The transition from subsonic to supersonic and vice versa produces pressure changes that again result in clouds of condensed water.

F/A-18 (all images above), AV-8B (left) and F-35B (right)







U-2S Dragon Lady



AV-8B Harrier



F-35B Lightning II



FM-2 Wildcat



P-51D Mustang



T-28B Trojan



NATO Exercise TRIDENT JUNCTURE 2018

Text by Joe Ciliberti, photography by Joe Ciliberti and Brendon Attard



CF188 Hornet, 401Sqn
Royal Canadian Air Force

Trident Juncture 2018 has just come to a close in the Northern part of Europe. Hailed as the largest NATO military exercise since the end of the Cold War, the exercise took place from the 25th of October to the 7th of November and was under the command of Admiral James G Foggo (USN), Commander of NATO's Allied Joint Force Command Naples. This was the second edition of Trident Juncture, the first one having taken place in South Western Europe in 2015.

Although Norway was the central point for this

mega exercise, Trident Juncture 2018 spilled over the surrounding areas of the North Atlantic and the Baltic Sea, including Iceland and the airspace of Finland and Sweden. The latter two nations are neutral countries but routinely participate in many NATO exercises across Europe and participated with their military hardware too, including SAAB Gripens from Sweden and F/A-18 Hornet from Finland. The exercise involved all 29 NATO members as well as the two countries already mentioned, with around 50,000 troops, 250 aircraft, 65 vessels and up to 10,000 vehicles.

The main objective of Trident Juncture 2018 was to ensure that NATO forces are trained, able to operate together, and ready to respond to any threat from any direction. Of course, the exercise did not go unnoticed by the Russian military forces that flew numerous missions near the exercise area and were promptly intercepted by NATO forces to ensure safety for all parties. While Russia paid particular attention to this specific exercise, being so close to its borders, the same scenario was played out during Trident Juncture 2015.

At the press conference mid way through the exercise, Admiral Foggo will not be drawn to announce where the next Trident Juncture will take place but was very positive about the success of the exercise especially in the deployment of so many thousands of troops and their equipment to Norway. He thanked the Norwegian Forces for their hospitality while reaffirming NATO's commitment to its members and partners wherever they may be.



- Overview of flying assets of the air forces participating in Trident Juncture, above
- Admiral James G. Foggo III (U.S. Navy), Commander Allied Joint Force Command Naples, left



 F-16C Blk 52+, 343 Mira
Hellenic Air Force




EF2000A, 18° Gruppo
Italian Air Force



 EF-18BM Hornet, 12 Ala
Spanish Air Force ▲



 F-16AM, FLO
Royal Norwegian AF ▲



▼ JAS39C Gripen, F21
Swedish Air Force 



▼ Tornado IDS, 6° Stormo
Italian Air Force 



Sea King Mk43B, 330 skv
Royal Norwegian AF ▲



KC-767A, 8° Gruppo
Italian Air Force



CC-150 (A310 MRTT) 437 Sqn
Royal Canadian Air Force ▲



Falcon 20ECM, 717 skv
Royal Norwegian AF



WARBIRDS DOWNUNDER

ARTICLE AND PHOTOGRAPHY BY JEROEN OUDE WOLBERS



The 2018 edition of the biennial Warbirds Downunder took place on 12 and 13 October 2018 at Temora Airport, New South Wales, Australia and home of the Temora Aviation Museum. The Aviation Magazine visited this event on Friday 12 October 2018 only. Under blue skies the public witnessed an impressive line up of aircraft on static display and a varied late afternoon / early evening flying program - a mix of current Australian Defence Force hardware and warbirds. The Aviation Magazine was privileged to gain media access to the other side of the runway in this normally for the general public backlit event.

Unfortunately due to relocation of the media pit (due to snake activity) not every single aircraft was in reach of the camera.

Australian Defence Force

The display was opened by The Roulettes, Royal Australian Air Force's display team flying one of the teams final displays in the Pilatus PC-9/A before being replaced by the Pilatus PC-21. Australian Defence Force flying displays continued through the late afternoon and early evening with the C-17A Globemaster III from 36 Squadron / RAAF Base

Amberley, the Hawk Mk.127 from 76 Squadron / RAAF Base Williamtown and the E-7A Wedgetail from 2 Squadron / RAAF Base Williamtown.

Warbirds

As mentioned before not every single aircraft was within reach of the camera, especially during the displays of the warbirds. Warbirds Downunder 2018 was dubbed the largest gathering of warbirds in Australia and on display were not only the aircraft from the Temora Aviation Museum but also aircraft from the Royal Australian Air Force Museum, the

Historical Aircraft Restoration Society, the Vintage Fighter Restorations, Paul Bennet Airshows amongst many others. Performing aircraft were a Supermarine Spitfire Mk XVI, a Supermarine Spitfire Mk VIII, a Cessna A-37B Dragonfly, a Lockheed Hudson, a CA-13 Boomerang, a CA-16 Wirraway, a Gloster Meteor F.8, a Cessna O-2A, a Hawker Hurricane Mk XII / XIIB, North American P-51 Mustangs, Curtiss P-40 Kittyhawks, Cessna O-1 Birddogs, CAC Winjeels, CT4A's and a Grumman TBM-3 Avenger.



Supermarine Spitfire Mk VIII

This aircraft was the last Spitfire acquired by the Royal Australian Air Force (RAAF). It was built by Supermarine in England in 1944, test flown and then shipped to Australia. The Air Force took delivery of the aircraft in April 1945, and, with World War II drawing to a close, the aircraft was not required on active service and was instead placed into storage. After the war, the aircraft was utilised at Sydney Technical College as an instructional airframe. It was then acquired by Sid Marshall who stored it, disassembled, at Bankstown until 1982. Colin Pay obtained

the Spitfire and began a detailed restoration program, which was completed in 1985 when the aircraft flew again.

The aircraft is painted in the green and grey camouflage colours worn by the Royal Australian Air Force aircraft defending Darwin during World War II and in operations in the South West Pacific. The aircraft carries the markings of Wing Commander R.H. (Bobby) Gibbes.

David Lowy acquired the aircraft in May 2000 and donated it to the Temora Aviation Museum in July 2002, where it is maintained in an airworthy condition.



Supermarine Spitfire Mk XVI

This Spitfire is an ex-wartime example, built at Vickers Armstrong's Castle Bromwich "fshadow factory", near Birmingham, in late 1944.

The aircraft's first action was on 24 March (wearing squadron code FU-P) when, laden with two 250lb bombs and a long range belly tank, the aircraft headed a flight of four Spitfires for an armed reconnaissance; briefed to bomb rail targets in the Utrecht / The Hague / Leiden area (The Netherlands). TB863's cannons were fired in anger for the first time during a strafing attack on a railway coach by the four, claimed as probably destroyed, before returning to altitude. The aircraft continued with these sorties flying twelve missions during its six weeks on operations; 23 hours 55 minutes in total.

On 17 July 1951, TB863 suffered a take-off mishap and was struck off charge as scrap. The aircraft was subsequently purchased by Metro-Goldwyn-Mayer as a stage prop for their film on wartime pilot Douglas Bader, filmed in 1955 as "Reach for the Sky". Twelve years later, TB863 emerged to be dusted down for a further film role in the "Battle of Britain". The aircraft was utilised as a spares supplier for those aircraft actually flying in the film.

The aircraft was then transferred to a new owner

and moved in December 1968 to Southend. In October 1982, the aircraft was moved to Booker and work on its restoration began with the aircraft receiving the civil registration of G-CDAN. The project was subsequently sold to Stephen Grey of The Fighter Collection and restoration was begun in earnest in February 1986. In 1987, the project was purchased by Tim Wallis who had dreamed of owning a Spitfire – this ultimately led to the development of his Wanaka, New Zealand-based Alpine Fighter Collection. On completion of the restoration, the aircraft was shipped to NZ where it was reassembled and test flown in January 1989 as ZK-XVI, in the hands of Stephen Grey.

Tim received an endorsement on the Spitfire and flew the aircraft at many airshows throughout New Zealand. Tim had re-painted the Spitfire in the exact livery of 453 Squadron including the squadron and aircraft codes 'FU-P' it wore on its first operational sortie across the English Channel in 1945.

Temora Aviation Museum acquired the aircraft in April 2006. The aircraft was disassembled by the Alpine Fighter Collection Team and shipped to Temora where it was reassembled and registered as VH-XVI. It is maintained in an airworthy condition.



Gloster Meteor F.8

In May 1946 a Meteor F.3 was taken on charge by the Royal Australian Air Force, becoming the first jet fighter in the history of the Royal Australian Air Force. It was not until 1951 that Meteors entered regular service and then they did so with a true "baptism of fire". Meteor F.8 aircraft were taken into action by 77 Squadron, in Korea, against the MiG15.

The Meteor F.8 in the Temora Aviation Museum's collection was built by Gloster in 1949 and carried Royal Air Force serial number VZ467, serving until 1982. Its last military role was as

a target tug. After being retired from the RAF, the Meteor was privately owned and operated in the United Kingdom. Upon being purchased by the Temora Aviation Museum, the aircraft was disassembled, transported to Australia and reassembled at Bankstown Airport. In August 2001, the Meteor flew from Bankstown to its new home in Temora, where it is maintained in an airworthy condition, making it the only Gloster Meteor F.8 flying in the world. Since being re-painted by the Temora Aviation Museum, the aircraft carries the markings of a Korean War era Meteor operated by 77 Squadron and flown by Sgt George Hale.

Cessna A-37B Dragonfly

The Cessna A-37B Dragonfly is a development of an aircraft originally designed in 1952 as a trainer for the United States Air Force. The A-37B in its current configuration is designed as a ground attack aircraft and was developed to meet the counter insurgency role.

The United States Government supplied 254 Cessna A-37B Dragonfly's to the Vietnam Air Force during the Vietnam War. Throughout the war, A-37s were used extensively in support of Australian ground forces with many missions being directed by Australian Forward Air Controllers. After the fall of South Vietnam in 1975, ninety-five Vietnam Air Force A-37B aircraft were captured and incorporated into the Vietnamese People's Republic Air Force,

the aircraft in the Temora Aviation Museum's collection was among those captured. It was used in active service by their new "owners" and played a part in several regional conflicts involving Vietnam.

In 1989, Colin Pay and Noel Vinson found several Dragonflies in Vietnam. Subsequently, ten were purchased from the Government of Vietnam and brought to Australia. These aircraft were fully restored to flying condition, and then two were acquired by David Lowy. These two A-37B Dragonflies have since been donated to the Temora Aviation Museum by David Lowy, with VH-XVA donated in December 2000. After extensive restoration work on VH-XVA by the Temora Aviation Museum's Engineering Team, the aircraft returned to flight in 2018.





Pacific Aerospace Corporation CT4A

Developed in New Zealand by New Zealand Aerospace Industries as a military training version of the Australian-designed Victa Aircruiser, the prototype of the CT4A first flew on 23 February 1972. Ordered by the Royal Australian Air Force as a replacement for the CAC Winjeel, the first of 51 CT4As arrived in Australia in January 1975, with the final aircraft delivered in June 1982.

Nicknamed the "Plastic Parrot" in RAAF service, the CT4A commenced service as a basic training aircraft at No 1 Flying Training School at RAAF Base Point Cook in late 1975. In addition to service at 1FTS, the CT4A was also operated by

the Aircraft Research and Development Unit at RAAF Base Edinburgh in South and the Central Flying School at RAAF Base East Sale for training Royal Australian Air Force flying instructors. The retirement of the CT4A from service in 1993 also meant the end of military flying training at RAAF Base Point Cook, an activity which had continued unbroken since 1914.

Stored since retirement from 1FTS in 1993, CT4A A19-077 has been returned to airworthy condition by the RAAF Museum's Technical Staff and Volunteers. The last CT4A to enter RAAF service, A19-077 took to the skies over RAAF Base Point Cook on 27 November 2006 for the first time since 27 May 1994.



Hawker Hurricane Mk. XII

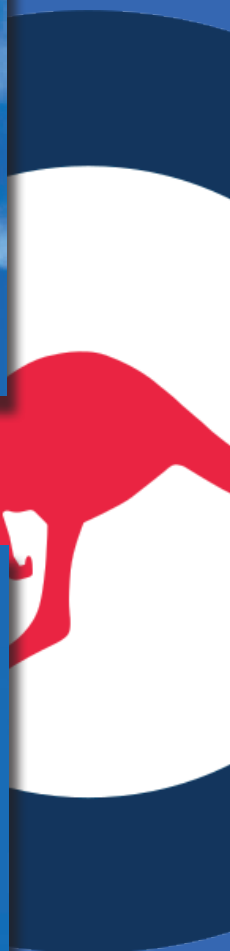
This former Royal Canadian Air Force aircraft, VH-JFW / serial number 5481, arrived in Australia on 7 April 2014 from Canada. This aircraft has undergone an extensive refurbishment program by Vintage Fighter Restorations at Scone, New South Wales. In early 2016, the majority of the airframe had been refurbished and the wings refitted to the aircraft. The Hurricane was moved to the paint shop at Vintage Fighter Restorations, where the camouflage and aircraft markings were applied. The colours and marking applied to the aircraft are extremely detailed and were researched as closely as possible to represent the aircraft of Battle of Britain pilot John Dallas Crossman, an Australian who flew with 32 Squadron and 46 Squadron and was killed on 30 September 1940. He was shot down in his Hurricane I (V6748) by a Messerschmitt Bf 109E. The scheme was specially chosen to honour the pilot who was from the New South Wales Hunter Valley region of Australia, close to Scone. Vintage Fighter Restorations arranged all the appropriate inspections and reports to

be carried out and filed with the appropriate authorities for its first flight in Australia on 2 October 2016 at Scone by pilot Ross Pay. The flight commemorated the last flight of John Dallas Crossman 76 years and 3 days earlier in the original Hurricane I (V6748). The Hurricane remains at Scone NSW in the care of Vintage Fighter Restorations.





- Pilatus PC-9A, Roulette display team, above
- Boeing E-7A Wedgetail, below
- BAE Systems Hawk Mk.127, right



The next Warbirds Downunder is scheduled for 2020. If you cannot or do not want to wait until 2020, you can always visit the Temora Aviation Museum Aircraft Showcases which are scheduled through the year. More details available at <https://aviationmuseum.com.au/events/>.

The Aviation Magazine would like to thank the Australian Defence Force Media Team and Team Temora Aviation Museum (in particular Nicola Curry) for their assistance and support prior, during and after Warbirds Downunder 2018.





Держслужба з надзвичайних ситуацій

STATE EMERGENCY SERVICE OF UKRAINE

Article and photography by Anthony F. Seychell



The State Emergency Service, which until December 2012 was known as the Ministry of Emergencies of Ukraine, takes care of the civil defense, rescue, and the protection of the population and territory during any emergency situation.

The State Emergency Service of Ukraine has its own aviation unit, called the Special Aviation Unit and Operational Rescue Service of the State Emergency Service (Спеціального авіаційного отряда Оперативно-спасательної служби гражданської захисти). It is based in Nizhyn to perform the rescue and the emergency situations functions. This Special Aviation Unit can work independently or in cooperation with other units of the State Emergency Service to fulfill its tasks. The Ukrainian Emergency Service, which reports to the Ministry of the Interior, is considered to be a "special military corps" under the Civil Defense Forces Law. The personnel are either volunteers or others serving the national defense requirement (conscription). Both types of personnel are subject to military discipline,

wear military-style uniforms and have military grades, the highest at individual unit level being Colonel.

Aircraft in the Fleet

Aircraft in the Fleet

The aviation unit has several aircraft types in its inventory, which includes the ubiquitous Mil Mi-8, the An 26, An 30 and An 32. A few years ago, the unit also received western aircraft in the form of EC145. The service also operates a little-known version of the Mil Mi-8 – the Mil Mi-9, (Hip-G, also designated as Mil Mi-8IV). Initially, these helicopters were meant to be used in the airborne command post version, however many of them have been converted to carry out the SAR role. In the past, the Mil Mi-8s were used for fighting forest fires as this helicopter can use a 5-ton tank. Regrettably, engine performance effectively limited the payload to around three tons of water. The limited fire-fighting performance led to the adoption of a dedicated fire-fighting aircraft, namely the An 32P "Firekiller".

The "Firekiller" is a special variant of the An 32 Cline transport aircraft capable of carrying effectively around eight tons of water. Additionally, its cockpit is equipped with optical sights that allow the second pilot to maintain visual contact with the fire during the whole approach to the water release point. Another advantage of the An 32P is that the aircraft is easily converted into a normal transport aircraft by removing the water tanks. In the transport role, the An 32P can carry eight tons cargo or up to 50 passengers. Furthermore, goods can also be parachuted via the freight ramp as in the case of the An 26.

The An 26 was initially used to transport personnel and medics directly to the disaster areas. In April 2016, the State Emergency Service received the first An 26 fitted out as an airborne hospital. The aircraft, having a range of around 2000km, is fitted with two high-quality intensive MEDEVAC modules for seriously injured persons and six more beds for patients who do not require intensive care. It is also equipped with 14 seats for mildly injured persons and has another six seats for medical personnel. Not all

the An 26s have been modified to the specialized MEDEVAC role. Its slightly larger counterpart, the An 30 Clank, assists the 'Cub' in the transport role. It is understood, though, that the An 30s used by the Rescue Service retain their aerial cartography functionality.

The Rescue Service acquired the first two EC145 helicopters in 2009 and these came equipped with a complete intensive care package for two patients. This is a "quick-change" package, which means that the equipment can be removed in about 20 minutes, thereby allowing the helicopter to be converted in a very short time for other missions such as firefighting or transport flights. Originally, it was intended that the helicopter would completely supplant the Mil Mi-8 because one flight hour of the Hip is more expensive than one EC145 flight hour. On the other hand, the Mil Mi-8 can carry a bigger payload and has more internal space while its maintenance is much easier. These advantages of the Mil Mi-8 over the EC145 led to some of the 'Hips' being modernized.



Future Acquisitions

In March 2018, Ukraine entered in a deal with Airbus Helicopters for the procurement of a number (around 50) of H145, H125 and H225 helicopters for the government. It is understood that seven H225s will be assigned to the State Emergency Service and a third squadron operating the new Super Pumas will be formed at Nizhyn. Training has already started and the first helicopters are expected to be handed to the Rescue Service in early 2019.

Livery

State Emergency Service aircraft and helicopters nowadays have distinctive red and white stripes along the fuselage with the service insignia, an orange cross on a white background on a red disc, on the forward or center fuselage. Helicopters also carry the national blue/yellow

roundel on the fuselage sides or on the fin. Fixed wing aircraft do not carry roundels but instead have the national trident insignia as a fin flash. Service titles are usually in Ukrainian (Cyrillic alphabet) on the port fuselage and in English (Roman alphabet) on the starboard fuselage of fixed wing aircraft, but not helicopters, which have titles in Ukrainian on both sides. Some aircraft are still in the old blue and yellow color scheme.

Nizhyn Air Base

Nizhyn is an air base in Chernihiv Oblast, equipped with a 3000m long concrete runway, originally conceived as a medium-sized bomber base for the Soviet Aviatsiya dal'nego deystviya (Дальняя Авиация, Long-Range Aviation). By 1967, there were around 24 Tu-22s (Blinders) based there. In February 1999, the base was

transferred to the Ministry of Emergency Situations and renamed 300 Special Aviation Squadron.

Acknowledgments

The author wishes to acknowledge the support and assistance of the Ukrainian authorities and

Emergency Services personnel who made possible the visit to Nizhyn and this report.



Mil Mi-8MT



Antonov AN 30



Antonov AN 32P



Antonov AN 26



Mil Mi-9 (Hip-G / Mi-8IV)



Airbus Helicopters EC145



SAN FRANCISCO FLEET WEEK

ARTICLE AND PHOTOGRAPHY BY GEOFFREY ARNWINE



The 2018 San Francisco Fleet Week Air Show took place on October 5-6. Headlining the show as always was the U.S. Navy Blue Angels with many other exciting performers. During the entire weekend, there were many ground activities around the city for people to visit with the main airshow exhibits at the Marina Green.

Flying activities kicked off at 1:00 pm with the opening ceremonies followed by a demonstration by the U.S. Navy parachute team known as the Leap Frogs who jumped from a U.S. Air Force C-130 Hercules of the Missouri Air National Guard. Towards the beginning of performances the show featured some cool military performances. The U.S. Coast Guard performed a rescue demonstration featuring two MH-65D Dolphin helicopters and a

C-27J Spartan, the newest aircraft in the branch's inventory. The Navy featured a rare formation flight of the new P-8 Poseidon and P-3 Orion. The P-8 is based off a Boeing 737 airframe and will replace the P-3 for patrol duties.

Turning back time was Gregory "Wired" Colyer performing in his Korean War era Lockheed T-33 Shooting Star trainer jet known as "Ace Maker II." The T-33 is based off of the F-80, the first operational jet fighter of the United States. Wired showcased the T-33 to the crowd with many different aerobatic maneuvers.

One of the major highlights of the show was the Patriots Jet Team locally based out of Byron Airport near Mt. Diablo. The Patriots consist of multiple pilots who used to fly for the Thunderbirds, Blue Angels, and Snowbirds flying in black painted L-39 Albatros

Czech trainer jets with red, white, and blue smoke. The team performed many maneuvers similar to those teams including formation flights, solo opposing head on passes, and other aerobatic maneuvers. Coming out of San Francisco International Airport was a Boeing 777 from United Airlines. The 777 made many rare maneuvers low over San Francisco Bay including high speed passes and dirty gear down passes.

The show featured two of the finest aerobatic performers in the world with t. The two pilots have been crowd pleasers at Fleet Week for many years. This year marked Sean Tucker's final year as a solo aerobatic performer before starting a formation team in 2019.

Concluding the airshow was the United States Navy aerial demonstration squadron, the Blue Angels.

Joined by them was their C-130 Hercules transport aircraft known as Fat Albert, making its first Fleet Week appearance in three years. The Blue Angels, lead by Cdr. Eric Doyle, performed many maneuvers pilots in the Navy and Marine Corps are trained to fly. Those included various formation flights and breaks as well as many solo routines including opposing head-on passes. After completing their performance, the team returned to Oakland Metropolitan Airport where many of the performers staged for the weekend.

After the conclusion of the aerial activities, the crowd was able to visit the many attractions offered on the ground. Special thanks to the event organizers, performers, the city of San Francisco, spectators, and sponsors for making Fleet Week 2018 a success!







P-8A Poseidon

P-3C AIP Orion

VP-30 Pro's Nest, NAS Whidbey Island



Two-ship formation of MH-65D
USCG Air Station San Francisco



- C-27J & MH-65D, U.S. Coast Guard, top right
- C-130H, MO Air National Guard, top left
- C-130T, Blue Angels support, above middle
- MH-65D, U.S. Coast Guard, above

- Boeing 777 from United Airlines, top left
- Sean D Tucker in his Challenger III, top right
- Mike Wiskus in his Pitts, above
- F/A-18A of the Blue Angels, center image

MILITARY MOVEMENTS AT STUTTGART, GERMANY

Stuttgart is not only the place where Mercedes and Porsche develop and manufacture their cars. It also is the home of several U.S. military headquarters, such as the Africa Command (AFRICOM), European Command (EUCOM), Special Operations Command Africa (SOCAF) and Special Operations Command Europe (SOCEU). Additionally an United States Army Airfield is located on Stuttgart's

International airport. For this reason, Stuttgart international airport (IATA-code: STR, ICAO-code: EDDS) is an excellent place to take photos of a wide variety of military and government aircraft, from countries all over the world.

The following photos were taken in 2018



U.S. Air National Guard C-40C, 201 AS ▲



▲ U.S. Air Force E-4B, 1st ACCS



▲ U.S. Air Force C-32B, 150th SOS



U.S. Navy E-6B, VQ-3 ▼



U.S. Navy C-40A, VR-61 ▼



▲ U.S. Air Force MC-130J, 67th SOS



U.S. Navy C-130T, VR-64 ▲



▲ U.S. Air Force C-17A, 437th AW



▲ U.S. Air Force KC-135T, 22nd ARW

German Air Force C-160D, LTG 63 ▼

German Air Force A400M, LTG 62 ▼





▲ U.S. Air Force U-28A, 319th SOS



U.S. Army MC-12S, 224th MI Bn ▲



▲ U.S. Air Force C-146A, 524th SOS



U.S. Army C-12U, 204th MI Bn ▼

▲ U.S. Air Force C-37A, 99th AS

U.S. Government DHC-7 ▼





▲ U.S. Air Force C-130H, 757th AS



U.S. Navy KC-130J, VMGR-252 ▲



▲ U.S. Air Force C-130H, 158th AS

U.S. Navy KC-130J, VMGR-234 ▼



▲ U.S. Navy KC-130T, VR-55

U.S. Air Force C-130J, 61st AS ▼





Tag der Bundeswehr at Wunstorf AB

Article and photography by Peter Thivessen



As part of this year's "Tag der Bundeswehr" (Armed Forces Day), there was a small but fine flying display at the German Air Force air base Wunstorf. Around 40,000 visitors were able to experience helicopter and transport and combat aircraft live during the flying display. The flight program was supplemented by an exhibition of aircraft and a wide variety of military equipment on the ground.

Wunstorf is located in the northern part of Germany, near the city of Hannover. The air base is home to the Lufttransport Geschwader LTG 62 (Air Transport Wing 62), flying the Airbus A400M. Germany has ordered a total of 53 aircraft to replace the about half-century old C-160D Transall transport aircraft. However, political, financial and technical problems delayed the development for several years. The first of the four-engine turboprop aircraft was taken over by the German Air Force in Wunstorf in December 2014. The Luftwaffe initially planned to keep only 40 of the 53 ordered transporters, thirteen A400M were to be resold. According to the latest plans, the thirteen transporters will now be used by the Air Force itself and probably based in southern Germany. Currently, the LTG 62 has already taken over almost half of its future A400M fleet of 40 aircraft.



- German Air Force A400M of the LTG 62 (main image)
- German Air Force C-160D Transall of the LTG 63 (above)
- This Nord N2501 Noratlas is the only one of more than 400 built that is left in flyable condition (left)



German Air Force H145M of the Hubschraubergeschwader 30



German Army EC135T1 of the Internationales Hubschrauber-ausbildungszentrum



German Army NH90-TTH of the Transporthubschrauber-regiment 30

A German Air Force Tornado IDS of the Taktisches Luftwaffengeschwader 51 seconds from touchdown with an A400M of the LTG 62 in the background





- Learjet 35A of the company GFD, used for aerial target simulation (above left)
- Piaggio P-149D (above right)
- Pilatus PC-9B of QinetiQ, providing operational live aerial training to the German Forces and NATO countries (below left)
- Dornier Do-27B-5 (below right)



Since 2009 we bring you the BEST for FREE
Aviation Magazine



© 2018 THE AVIATION MAGAZINE