

THE AVIATION MAGAZINE

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Nº 63 May-June 2019
Volume 10, Issue 3




- **Boeing B-52 deployment to RAF Fairford, UK**
- **Red Flag 19-1, Nellis AFB**
- **AIRSHOW CHINA 2018**
- **Farewell to the King, Belgium**
- **And so much more ...**

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Cover: Westland Sea King Mk.48 Search And Rescue helicopter © 2019 Kris Christiaens

This page: A Spanish Navy SH-60B being checked by the ground crew prior to takeoff © 2019 Peter Thivessen



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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.

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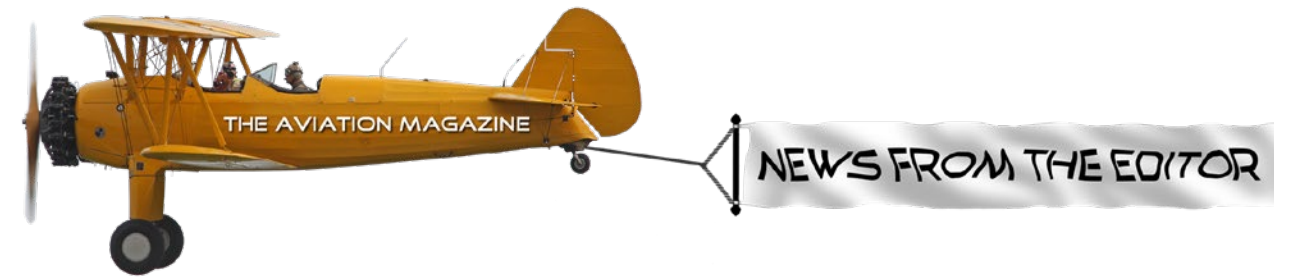
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This edition again is packed with a colorful mixture of events: air base visits in Spain and Hungary, pictures from the Red Flag exercise at Nellis AFB, a report on the deployment of six U. S. Air Force B-52 *Stratofortress* long range bombers to RAF Fairford and, for the first time in our magazine, a report on the AIRSHOW CHINA. We also say goodbye to the Westland Sea King SAR helicopter in the Belgian Air Force. On March 10th this year, after 45 years of service, the last Belgian Sea King flew its final mission. And there is even more in this issue, just find out for yourself.

Here is some of what we will bring to you in our next issue: another Red Flag exercise, Hungarian Mi-24P helicopters live shooting and a photo-report on the annual Frisian Flag exercise at Leeuwarden AB, The Netherlands. We also cover the increasingly important multinational exercise INIOCHOS in Greece with Italian F-35 *Lightnings* and F-16s from the Israelian Air Force. We will feature the fire fighting operations with the Canadair CL-215 at the Balearic Islands. And from Downunder THE AVIATION MAGAZINE will report on AVALON 2019, the biennial Australian International Airshow.

Thank you very much for reading and downloading THE AVIATION MAGAZINE.

Ralf Peter WALTER
Editor & Publisher

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B-52 DEPLOYMENT TO RAF FAIRFORD

REPORT BY FELIX MAYER



From 14 March until 7 April, six Boeing B-52H Stratofortress (nickname BUFF) and more than 400 personnel assigned to the 2nd Bomb Wing, based at Barksdale AFB, deployed to RAF Fairford, UK. This Bomber Task Force deployment was in support of Operation Atlantic Resolve. The purpose of Atlantic Resolve is to build readiness, to increase interoperability and enhance the bonds between ally and partner militaries with multinational training events in Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland and Romania

The B-52s conducted over 40 missions across Europe, operating alongside the European NATO allies. They also supported the Northern African joint military exercise African Lion between the U.S. and Morocco. One of the most remarkable theater familiarization flights took place on 28 March when a five-ship formation of BUFFs flew a nine-hour roundtrip to the North Pole. The mission was carried out in conjunction with the Royal Norwegian Air Force

(RNoAF) within the territory of the Norwegian Sea. The RNoAF's main task was to act as FAC (Forward Air Controller) and JTAC (Joint Terminal Attack Controller). The B-52s were loaded with practice and live bombs during those CAS (Close Air Support) missions. Tanker support was provided by KC-135R Stratotankers of the 100th Air Refueling Wing at RAF Mildenhall. This Bomber Task Force deployment to Europe marked the largest B-52 deployment since Operation Iraqi Freedom in 2003 when up to 17 Buffs were temporarily based at RAF Fairford.

RAF Fairford is the main FOB (Forward Operating Base) for all U. S. Air Force bomber units and their three bomber types (B-1, B-2 & B-52) within the U. S. Air Forces in Europe and Air Forces Africa (USAFE-

AFAFRICA) territory.

The 420th Air Base Squadron, which is part of the 501st Combat Support Wing, is responsible for operating the base and its movements. Since 2014 and the rising tensions between Russia and the NATO due to the Ukrainian crisis, RAF Fairford has seen an increase in regular heavy bomber deployments. Those are usually linked to large NATO exercises like Baltops, Saber Strike and Ample Strike that are held on a regular basis.

Russian Forces were attracted by the presence of the B-52s in eastern Europe. Several interceptions by Russian fighter aircraft were observed during the missions in international air space above the

Baltic Sea. Another Russian reaction was a burst in their own bomber operations in international airspace close to Iceland, Denmark and the United Kingdom. On 18 March 2019, the Italian Air Force, during their air policing operations at Iceland, encountered Russian Navy Tupolev TU-142 bombers. Royal Air Force Typhoons were scrambled on 29 March 2019 to intercept two Tupolev TU-160 Blackjack long range bombers.

With the upcoming Baltops Exercise from June 09-21, 2019, U. S. Air Force heavy bombers are expected to return to RAF Fairford by the beginning of June.

B-52H of the 20 Bomb Squadron on final approach to RAF Fairford
All photos Felix Mayer unless credited otherwise



- B-52 *Stratofortress* taking off with a lot of over wing vapor (inset above)
- Returning home from its mission this B-52 *Stratofortress* flies over the air base before entering the traffic pattern (main image)



- Another B-52 *Stratofortress* on final approach to runway 27 (inset above)
- With its flaps fully extended this B-52 *Stratofortress* is just about to land on runway 27 (inset left)





This U.S. Air Force B-52 Stratofortress approaches a KC-135 Stratotanker from the 100th Air Refueling Wing, RAF Mildenhall, England, before receiving fuel above the English coast.
(U.S. Air Force photo by Tech. Sgt. Emerson Nuñez)



A U.S. Air Force B-52 Stratofortress pulls away from a KC-135 Stratotanker from the 100th Air Refueling Wing, RAF Mildenhall, England, after receiving fuel off the English coast. (U.S. Air Force photo by Tech. Sgt. Emerson Nuñez)



This U.S. Air Force B-52 Stratofortress breaks away from a U.S. Air Force KC-135 Stratotanker from RAF Mildenhall over Romania after having received 77,000 pounds of fuel from the tanker aircraft (U.S. Air Force photo by Senior Airman Benjamin Cooper)

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to BLUE ★ KC-135 DEMO
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Boeing B-52H Stratofortress

First flight	5 August 1954 (B-52A)
Length/Width/Height	48,5 m / 56,4 m / 12,4 m
Propulsion	eight 75.6 kN P&W TF33-P-3
Max take-off weight	more than 488,000 lb
Max weapons load	approx. 70,000 lb
Range (max fuel)	more than 8,685 nm
Crew	Six - pilot, co-pilot, navigator, radar navigator, ECM operator

75th ANNIVERSARY OF SPAIN'S ACADEMIA GENERAL DEL AIRE

REPORT AND
PHOTOGRAPHY BY
PACO JOVER



The Academy (Academia General del Aire – AGA) was established in 1945 in the city of San Javier (Murcia), located in the southeast of Spain and at the seaside of the Mar Menor. Its main mission is to train and graduate men and women to become Air Force pilots.

Nowadays, two types of aircraft are used for training: AIRBUS C-101 Aviojet and ENAER T-35C Pillán. The C-101 is also flown by the aerobatic team, Patrulla Aguila (Eagle Patrol).

From the 8th to the 10th of June 2018, an open day for spotters (Friday 8th), static display (Saturday 9th) and an air show on Sunday morning were held. Spain's King Felipe VI presided the air show on Sunday. He was a cadet of the Academy during his military education.

The air show was at the beach and more than 300.000 people enjoyed the show with planes, helicopters, parachutes and aerobatic display teams.

Together with the Spanish Air Force were the Spanish Navy and Army, the U.S. Marines, U.S. Air Force and the Italian Air Force.

The flying display also included some civil aircraft such as a Dornier Do27, Beechcraft Mentor, T-6 Texan and three Bucker Jungmann of the Fundación Infante de Orleans (FIO). The FIO is a flying museum with 43 airplanes manufactured between 1925 and 1970.

Jorge Macias, an aerobatic pilot, participated with a LASER Z300 built by himself.

The Italian aerobatic display team Frecce Tricolori with ten Aermacchi MB-339 PAN (Pattuglia Acrobatica Nazionale) is the largest aerobatic team in the world. The MB-339 PAN is an Italian military jet trainer developed from the A model adding a smoke generator and removing tip tanks, powered by a Rolls Royce Viper Mk 632 with a maximum speed of 940 km/h. Top level



aerobatic display with ten airplanes flying in close formation. Amazing manoeuvres.

ASPA patrol with its five Eurocopter EC-120 Colibri is the only helicopter aerobatic display team. The pilots are instructors of the Spanish Air Force helicopters academy. The team (pilots and ground support) is highly skilled and has major international experience by participating in air shows all around Europe. The EC 120 is used as a trainer in the flying school. It is a five-seat, light multimission helicopter powered by a single 540 hp engine. It incorporates several of Eurocopter's technologies, such as the 8-bladed Fenestron anti-torque tail rotor.

Patrulla Aguilla, the jet display team of the Spanish Air Force, put the finishing touch on the air show with an amazing fly-by very close to the crowd and perfect aerobatic manoeuvres over the sea. Pilots know the area very well, because they are part of the academy. They are

instructor pilots and they train and prepare their display there.

Some other aircraft flying during the show were the Bell MV-22B Osprey (U.S. Marine Corps), Boeing KC-135 (U.S. Air Force); from the Spanish Air Force a Lockheed P 3 Orion, Canadair CL-415, E-35 C Pillán, Eurofighter EF2000 Typhoon (142nd squadron, 14th wing, based in Albacete, painted with tiger color scheme) and an EF-18M Hornet (12th wing, Torrejón de Ardoz). The Spanish Navy was present with the AV-8B Harrier II Plus and the Spanish Army with the Eurocopter EC 665 Tiger.

Formation of the two types of trainer aircraft that are flown by the Academia General del Aire . The leading aircraft is a C101EB Aviojet, the other one is a T-35C Pillán.



■ Spanish Air Force Falcon 900B of the 451 Escuadrón (upper inset)
■ Do-27B1 (CASA-127) of the Fundación Infante de Orleans. This aircraft was operated by the Academia General del Aire (lower inset)
■ Spanish Navy EAV-8B Harrier II, 9 Escuadrilla (main image)



- Spanish Air Force helicopter display team **ASPA** with EC-120 *Colibri* (left inset)
- Italian Air Force display team **Frece Tricolori** with MB-339 PAN (right inset)
- Spanish Air Force display team **Patrulla Aguila** with C101EB *Aviojet* (main image)



- Spanish Air Force EF-18M *Hornet* (upper inset)
- Spanish Army EC 665 Tiger HAD (lower inset)
- Spanish Air Force EF2000 *Typhoon* (main image)



- C101EB Aviojet, T-6G Texan, T-34B Mentor and T-35C Pillán (left inset, left to right)
- Three Bücker Jungmann of the Fundación Infante de Orleans (middle inset)
- Spanish Air Force CL-215T of the Grupo 43 (right inset)
- Spanish Air Force P-3M Orion of the Grupo 43 (main image)



■ U.S. Air Force KC-135R Stratotanker of the 100 ARW, 351 ARS (inset)
■ U.S. Marine Corps MV-22B Osprey of VMM-263 (main image)

Morón de la Frontera Air Base in Spain

Article and photography Peter Thivessen



Spanish Air Force Eurofighter EF2000 of Ala 11 with Spanish Navy Sikorsky SH-60B of the 10 Escuadrilla in the background



The Air Base Morón de la Frontera (Spanish: Base Aérea de Morón de la Frontera) in the region of Andalusia in southern Spain is a major air base of the Ejército del Aire (Spanish Air Force). The base is about 10 miles north east of the city of Morón de la Frontera nearby Sevilla.

The main activity of the airfield is from Ala 11 (11th Wing) of the Spanish Air Force, consisting of two squadrons: Escuadron 111 is the operational squadron and Escuadron 113 the training squadron. Both units operate the Eurofighter EF2000 *Typhoon*. The base is also

home to Grupo22 with the maritime patrol squadron Escuadron 221 and their Lockheed P-3M *Orions*. Besides the Spanish activity, the U.S. Air Force uses Morón on a regular basis for both transport aircraft and fighters, especially as a stopover for flights between North America and the Middle East.

All activities take place on the eastern side of the runway. The air base is very large and has enough space for extensive activities. In the southern part are the shelters of the two *Typhoon* squadrons. On the platform, the

Typhoons are located under sun sheds. Morón is one of three home base for the Eurofighter, the other two being Albacete and Zaragoza. Esq 221 with their *Orions* is located in the northern part of the base. The squadron has only three active P-3M, two of them very often are being deployed outside the country.

From 1984 to 2011, the airfield served as an emergency landing site for the space shuttle if there were problems during the launch that would have made a landing on the other side of the Atlantic necessary.

Morón's massive flight line, in-ground aircraft refueling system, long runway and prime location on the Iberian peninsula, close to the Mediterranean and the Middle East, makes the base an important link in any operation.

MUCHAS GRACIAS! The author thanks Sergeant First Class Carlos Garcia Minana for the great hospitality on base during the visit and for supporting *The Aviation Magazine*.

Spanish AF Lockheed P-3M
Grupo 22, 221 Esc





Spanish Air Force Beech C90
Ala 35, 409 Esc, Getafe AFB



Spanish Navy Sikorsky SH-60B
10 Escuadrilla, NS Rota



Spanish AF CASA CN235-10M
Centro Cartográfico y Fotográfico,
403 Esc, Getafe AFB



U.S. Air Force Boeing KC-135R
100 ARW, 351 ARS, RAF Mildenhall



Spanish Air Force Cessna 560
Centro Cartográfico y Fotográfico,
403 Esc, Getafe AFB

RED FLAG 19-1

Article and photography by Geoffrey Arnwine



On January 26 to February 15, 2019, Nellis Air Force Base, Nevada hosted Red Flag 19-1. This is North America's largest aerial military exercise and features many aircraft units from around the world to increase pilot proficiency. This year's participants included more than 20 squadrons and types of aircraft from the

United States Air Force and Navy as well as the United Kingdom and Australia.

Though this event is not open to the public, many photographers spot outside of the base at places such as the Las Vegas Motor Speedway and Cheyenne Ave.

"Red Air" formation of two USAF F-16C *Fighting Falcon* of the 64th Aggressor Sqn and two L-159E *Honey Badger* of Draken International Inc. returning to base after mission completed.



Participating Units

- USA 4th Fighter Squadron, Hill AFB, UT - F-35A Lightning II
 6th Air Mobility Wing, MacDill AFB, FL - KC-135R Stratotanker
 12th Airborne Command and Control Squadron, Robins AFB, GA - E-8C J-STARS
 22nd Air Refueling Wing, McConnell AFB, KS - KC-135R Stratotanker
 64th Aggressor Squadron, Nellis AFB, NV - F-16C Fighting Falcon
 69th Bomb Squadron, Minot AFB, ND - B-52H Stratofortress
 79th Fighter Squadron, Shaw AFB, SC - F-16CM Fighting Falcon
 79th Rescue Squadron, Pope AFB, NC - HC-130J Hercules
 92d Air Refueling Wing, Fairchild AFB, WA - KC-135R Stratotanker
 199th Fighter Squadron, JB Pearl Harbor-Hickam, HI - F-22A Raptor
 960th Airborne Air Control Squadron, Tinker AFB, OK - E-3B Sentry
 HSC-23 "Wildcards," NAS North Island, CA - MH-60S Seahawk
 VAQ-131 "Lancers," NAS Whidbey Island, WA - EA-18G Growler
 VAQ-132 "Scorpions," NAS Whidbey Island, WA - EA-18G Growler
 VFA-136 "Knighthawks," NAS Lemoore, CA - F/A-18E Super Hornet
 Draken International - A-4N Skyhawk & L-159 Alca
- RAF No. 5 Squadron, RAF Waddington, UK - Sentinel R1
 No. 6 Squadron, RAF Lossiemouth, UK - FGR4 Typhoon
 No. 8 Squadron, RAF Waddington, UK - E-3D Sentry
 No. 10 Squadron, RAF Brize Norton, UK - KC3 Voyager
- RAAF No. 2 Squadron, RAAF Williamtown, Australia - E-7A Wedgetail
 No. 10 Squadron, RAAF Edinburgh, Australia - AP-3C Orion
 No. 77 Squadron, RAAF Williamtown, Australia - F/A-18A+ Hornet



RAF KC3 Voyager of No. 10 Sqn (main image) and Typhoon FGR4 of No. 3(F) Sqn (inset)



The Royal Australian Air Force deployed six F/A-18A legacy *Hornets* of No.77 Sqn to Nellis AFB







- F-35A *Lightning II*, 4th FS (top left)
- F-15C *Eagle*, 433rd WPS (top middle)
- T-38C *Talon*, 435th FTS (middle)
- F-22A *Raptor*, 199th FS (bottom left)
- F-16CM *Fighting Falcon*, 79th FS (bottom middle)
- A-10C *Warthog*, 422nd TES (right)



- USAF KC-135R *Stratotanker*, 22nd ARW (main image)
- USAF HC-130J *Hercules*, 79th Rescue Sqn (left inset)
- USN MH-60S *Seahawk*, HSC-23 (right inset)



Draken International, Inc.

is a company that provides tactical fighter aircraft to support training objectives of air forces around the globe. The range of missions includes among others airborne adversary support (Red Air), Close Air Support (CAS), and Electronic Warfare (EW) support. Draken International, headquartered in Lakeland, Florida, currently operates about 150 ex-military aircraft.



- Aero L-159E *Honey Badger* (inset above, main image)
- Douglas A-4 *Skyhawk* (inset right)



- USN F/A-18E *Super Hornet*, VFA-136 (insets above and right)
- USN EA-18G *Growler*, VAQ-131 and VAQ132 (main image and inset top right)



AIRSHOW CHINA 2018

REPORT AND PHOTOGRAPHY
BY ANTHONY F. SEYCHELL



CHINA INTERNATIONAL AVIATION & AEROSPACE EXHIBITION

In November 2018 the city of Zhuhai in the Guangdong province, China, again served as a venue for the largest airshow in China when it hosted the China International Aviation & Aerospace Exhibition, also known as Airshow China or Zhuhai Airshow. This biennial event is held in even years at Zhuhai Jinwan Airport, the former Zhuhai Sanzao Airport, which began construction in December 1992 and opened in June 1995. This airport hosted the first Airshow China in November 1996.

The objective of Airshow China is to gather international aviation and aerospace enterprises to showcase the latest technology and products in the fast-growing Chinese market. The Zhuhai Airshow Center offered the largest exhibition area ever, covering 500,000 m² indoors and outdoors, while a number of the around 770 exhibitors from over 40 countries were housed in brand new exhibition halls, covering an area of almost 70,000 m². These exhibitions covered all aerospace sectors, together with defence industries promoting a line-up of state-of-the-art products, ranging from satellites and armaments to large aircraft and unmanned aerial/surface vehicles.

The event served to display major innovations and the latest achievements across such fields as integrated circuit design, aircraft maintenance and general-purpose airplanes. In fact, light sport aircraft, RPAS/UAVs and GA aircraft, together with a large number of military vehicles, were the main display items of

China Airshow 2018. In the static display, one could see the Liaoning General Aviation Academy RX1E two-seat electric aircraft, the Sunward SA 60L Aurora LSA, the MuYu Aero Triphibia, a creative means of transport that can drive, fly or swim, and the JC-100N, a small three-seat, all-metal high-wing aircraft, amongst a host of similar aircraft. The visitors also got a glimpse of China's latest tactical weaponry and stealth drones

- such as:
- CM-401 anti-ship missile
 - various types of gun/howitzer/mortar systems
 - NORINCO light- and heavily-armoured vehicles
 - ATV-based anti-tank missile systems
 - Jonyang JY816-RF all-terrain, armoured, articulated vehicle
 - TD15 high-speed unmanned helicopter
 - AVIC AV500W combat UAV



- Sunward SUH-50 FeiYue VTOL UAV
- CH-7 UAV, a high-altitude, high-speed machine capable of carrying out a range of missions, from reconnaissance to air combat.

In one of the large exhibition halls China and Russia unveiled a life-size model of the CR929, a passenger airliner being co-developed by the two countries.

The large state-owned aerospace and defence firm, AVIC, was the key exhibitor. In the static display, the exhibits ranged from the AVIC AG50 Lingyan (Leading Eagle) light-sport aircraft to AVIC AG600, the largest amphibian aircraft in the world. For me, the only foreign participant of any particular note in the static display was the Kazan/Russian Helicopters Ansat, light, multipurpose helicopter. China Association of Emergency Medicine, during the Airshow China 2018, came to an agreement with Russian Helicopters to buy 20 Ansat.

The military side of the static display was less abundant as it featured only a sole example of

- Chengdu J-10B Firebird,
- Harbin Y-12D,
- Changhe Aircraft Industries Corporation (CAIC) Z-10K Fierce Thunderbolt,
- Shaanxi Y-9,
- Xian Y-20A Kunpeng,
- Shaanxi KJ-500 (AEW version of the Y-9),
- Xi'an JH-7 Flounder (FBC-1 (Fighter/Bomber China-1) Flying Leopard),
- Xian H-6K (a heavily redesigned version of the Soviet Tupolev Tu-16 capable of carrying air-launched cruise missiles).

A decommissioned Nanchang Q-5L Fantan, preserved in white color-scheme, was also on show. Additionally,

in the static display, there was the company demonstrator FTC-2000G Shanying (Mountain Eagle), an improved multi-role attack variant of the Guizhou JL-9 fighter-trainer. Foreign military participation in the static display was paltry and consisted only of a Pakistani Air Force PAC JF-17.

The military flying display was quite limited, consisting of aerobatic displays by the PLAAF Ba Yi (August 1st) and the Hongying (Red Falcon) air demonstration teams, flypasts by Chengdu J-20 Mighty Dragon and, on Sunday only, a Y-20, together with aerobatic solo displays from two Pakistani AF 26 (MR) Squadron 'Black Spiders' JF-17s. From my side, the only aircraft of interest in the small civilian flying display was the Cirrus Vision SF50 (also known as the Vision Jet), a single-engine very light jet aircraft.

Airshow China 2018 seemed to have been scaled back because, when compared with previous editions, there were less displays and performers. One of the reasons could be that the trade war with USA and the ensuing ongoing tensions weighed heavily on the aerospace sector, forcing cost cuts. Despite the scaled back event, Chinese media announced that the 12th China International Aviation & Aerospace Exhibition resulted in deals, including sales of 240 aircraft, worth more than \$21.2 billion.

As a first-time visitor to the event, many of the local exhibits, both civil and military, were extremely interesting. I have to admit that I did not miss much the reduced foreign participation. On the whole, I found Airshow China 2018 a well-organized and interesting event, certainly worth another visit in the not so distant future.

People's Liberation Army Air Force Chengdu J-20A Mighty Dragon, a 5th generation, all weather, stealth fighter



PLAAF Shaanxi Y-9 Tactical Transport



Eurocopter EC225LP of the China Maritime Safety Administration



PLAAF Shaanxi KJ-500 Airborne Early Warning and Control (AEW&C)



PLAAF Xian Y-20A Heavy Transport



PLAAF Xian H-6K Long Range Strategic Bomber



Pakistan Air Force PAC JF-17 *Thunder*. The JF-17 is jointly developed by the Pakistan Aeronautical Complex (PAC) and the Chengdu Aircraft Corporation (CAC) of China. The Chinese designation is FC-1 *Xiaolong*.



People's Liberation Army Air Force
August 1st Air Demonstration Team,
flying the Chengdu J-10 fighter



People's Liberation Army Air Force
Red Falcon Air Demonstration Team,
flying the Nanchang JL-8 trainer





The AVIC Y5B6 is a Chinese licence built Antonov An-2. This particular aircraft is equipped with a Honeywell TPE331-UAN turbo-prop engine (above)



Harbin Y-12E, Air Express Airline (above)



Pilatus PC-12/47E, Yajie General Aviation (above)



Harbin Y-12D of the People's Liberation Army Air Force



CAIC Z-10K of the People's Liberation Army Air Force



FAREWELL TO THE KING

REPORT AND PHOTOGRAPHY BY KRIS CHRISTIAENS





In March 2019, the Belgian Air Force officially said goodbye to the legendary Westland Sea King Mk.48 search and rescue helicopter. Belgium bought five of these helicopters in 1974 (RS01, RS02, RS03, RS04 and RS05) to replace the Sikorsky HSS1 and Sikorsky S-58. Originally intended for the Egyptian army, these five helicopters were given the remarkable camouflage colors. For political reasons, the Egyptian deal was canceled and these five helicopters ended up in Belgium. The first Belgian Sea King Mk.48 started its operations in 1976 and took over the SAR role of the Sikorsky HSS1. All of the Belgian Sea Kings became part of the 40th helicopter squadron which is dedicated to search and rescue (SAR) operations from the Koksijde Air Base, located at the Belgian coastline. The official motto of this squadron is 'Aude Audenda', which means 'Dare to dare'. Between 1976 and 2019 the Sea Kings of the Belgian Air Force were scrambled more than 3,300 times and saved more than 1,700 lives. All together, the five helicopters had almost 60,000 flying hours. After 43 years of loyal service, these legendary helicopters are replaced by NH90 NFH helicopters. Most of the scrambles of the Belgian Sea Kings were executed for incidents along the Belgian coastline.

One of them was the *Herald of Free Enterprise* disaster off the coast at Zeebrugge in March 1987 where thirty people were rescued during night from the capsized ship. Thanks to the quick intervention of the Belgian Sea King rescue helicopter, the number of casualties was limited. Also many fishermen and sailors owe their lives to the well trained crews of the Belgian Sea King helicopters during interventions for capsized fishing boats and yachts. When the weather on the North Sea became too rough and people got into trouble, the pilots, navigators, divers and medics of the 40th Squadron often made the difference between life and death. Even when two ships collided in Dutch waters in December 2012, a crew of a Belgian Sea King managed to save seven crew members of the cargo ship *Baltic Ace* in difficult circumstances. Besides missions over the sea, the Sea Kings were also used countless times for the transport of victims of disasters. For example, the 40th Squadron was called up in 1994 for the transport of heavily burned victims during a fire at the Switel Hotel in Antwerp. Also in 2001 and 2004, the Belgian Sea King was used

to transport burned victims to several hospitals after a fire at a bar in Volendam (The Netherlands) and the gas disaster in Gellingen (Belgium). The helicopters were also used several times for urgent organ transport. The usefulness of the old SAR helicopters was once again proven in 2015 when they were used to transport people who were seriously injured during the terror attacks in Brussels on March 22th.

The Sea King SAR helicopters will always have a special place in the hearts of the Belgian public. The most important reason for this is undoubtedly the popular Belgian television series and movie 'Windkracht 10'. While the television series were broadcasted in 1997 and 1998, the movie premiered in 2006. During these television series and movie, the general public was introduced to the world of the Sea King SAR helicopter and their crews at the Koksijde airbase. Thanks to this, many young people in Belgium and abroad were inspired by the wonderful work of the crews of the 40th Squadron and the Belgian Air Force. After 523 rescue operations, the RS01 became the first Belgian

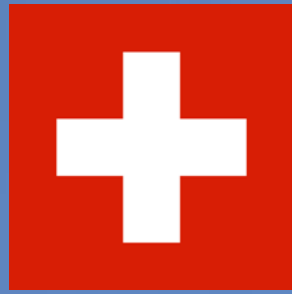
Sea King to be permanently grounded. This helicopter was given a final resting place in 2009 at the Royal Army Museum in Brussels. The Belgian Sea Kings were also regular participants at numerous air shows in Belgium and abroad. In 2018 the Belgian Air Force organized a farewell tour of the legendary Westland Sea King Mk.48 SAR helicopter. During this farewell tour, the general public could enjoy one last time the impressive demonstration of the Westland Sea King Mk.48. After the 2018 airshow season, a final formation flight was carried out on December 12th, 2018 above Flanders with the last three operational Sea Kings. Then the helicopters were taken out of service one by one until the last Belgian Sea King flew its final mission on March 10th, 2019. A big farewell event was organized by the Belgian Air Force on March 21, 2019 at the Koksijde airbase. During this event, the last flying Belgian Sea King (RS05) visited all major cities along the Belgian coastline and conducted a special formation flight with a Norwegian and German Sea King search and rescue helicopter. After the formation flight, the RS05 received a water salute by the fire brigade after which the engines were finally shut down.







RS02



WEF 2019

World Economic Forum in Davos, Switzerland

Photoreport by Ralf Peter Walter



AS332M-1 Super Puma
During the WEF the Swiss Air Force is taking over police duties



▼ AS532UL Cougar

▲▼ AS332M-1 Super Puma





Eurocopter EC635P2+
As a fast and agile helicopter the EC635
is perfectly suited for police operations



- EC155B1, Heli-Link Helikopter AG (above)
- AW-139, Monacair (right)
- EC135, Lions Air Group AG (middle right)
- A109 S Grand, Lions Air Group AG (far right)
- EC135P1, Japat AG (main image)

Talavera la Real Air Base in Spain

Article and photography
Peter Thivessen



The Air Base Talavera la Real (Spanish: Base Aérea de Talavera la Real) is an air base of the Ejército del Aire (Spanish Air Force), named after the nearby municipality of Talavera la Real. The Airfield is used in both the military and civil role. However, the civil activities are very limited with a small terminal and a very small number of regular flights. The civilian part of the airport is called Badajoz, after the city of Badajoz in the region of Extremadura close to the Portuguese border. The main activity of the airfield is from Ala 23 (23rd Wing) of the Spanish Air Force with its two squadrons: Escuadron 231 and Escuadron 232. Both units operate the dual-seat F-5M, a

modernized version of the SF-5B+, built under license by CASA (Construcciones Aeronáuticas, SA). Ala 23 is operating about twenty active F-5M. The two-seat trainer version is in use by the Spanish Air Force for fast-jet training and lead-in fighter training for future pilots on Eurofighter EF2000 *Typhoon* and EF-18M *Hornet*. The long history of the Air Base Talavera begins with the construction in 1953. The air base was home to the Lockheed T-33 *Shooting Star* and the North American F-86 *Sabre* before in 1970

27 Northrop F-5B *Tiger II* arrived in Talavera. In 2005, a major modernization program was carried out and in 2010, new Martin Baker ejection seats were installed. After the modernization, the F-5M is equipped with modern avionics including a 'glass' cockpit, several multi-functional displays, hands on throttle and stick (HOTAS) controls and a new radar system. This modernization enables future jet pilots to become acquainted with the systems in modern fighter aircraft.

The author thanks Wing Commander Lt Colonel Marazuela and Major Juan Gordillo Fernandez for the great hospitality on base and for making this report possible. MUCHAS GRACIAS









NIGHT FLYING AT THE 59TH AIR BASE, HUNGARY

ARTICLE AND PHOTOGRAPHY BY ISTVÁN KELECSÉNYI



The 59th Air Base is the fixed-winged part of the Hungarian Air Force (HuAF). The 59th consists of only one tactical fighter squadron and one airlift squadron.

The Hungarian Air Force is leasing fourteen JAS 39 *Gripen*s until 2026, two of which are two-seaters. Their 59/1 Fighter Squadron is nicknamed "Puma" and operates JAS 39C/D *Gripen* fighters.

On 19 May 2015, one two-seater *Gripen* crashed at the end of the runway at the Čáslav AFB. The pilots ejected safely, but the aircraft, serial 42 with callsign PUMA66, was written off, damaged beyond repair. After the lease period expires, Hungary will own the remaining *Gripen*s.

On the nights of 28-30 August 2018, night flights took place at the Kecskemét Szentgyörgyi Dezső Air Base. The flights lasted from 17:00 hrs until midnight. To train flying at night is key for the pilots to be able to successfully perform missions 24 hours a day, not only in times of war but also in peace. The HuAF has two JAS 39 fully armed on Quick Reaction Alert (QRA) to intercept and identify unknown or not responding aircraft entering the Hungarian airspace; around the clock on 365 days/year.

Preparation for the training flights already began in the daytime. The first take-offs were at sunset. Three waves of three to four JAS 39 *Gripen* (including one two-seater) were flown. In addition to the aircraft readied for the training flights, the two armed QRA *Gripen*s also took off in the evening, when six

Gripen (almost 50% of the inventory) flew at the same time.

The Aviation Magazine thanks the Hungarian Air Force at the Kecskemét Szentgyörgyi Dezső Air Base for making this article possible.







OLEG ANTONOV STATE AVIATION MUSEUM

KIEV, UKRAINE

REPORT AND PHOTOGRAPHY
BY STEFANIE HOSCHKA



The Ukraine State Aviation Museum in Kiev is named after Oleg Konstantinovich Antonov, one of the most famous Soviet aircraft designers. He died in Kiev in 1984 at the age of 78.

The Oleg Antonov State Aviation Museum was established in 2003 and shows an enormous variety of Soviet built, mostly military, aircraft. Long range bombers such as the Tu-22 Backfire and Tu-95 Bear, Be-12 flying boats, MiG and

Sukhoi fighter aircraft, Mil Mi helicopters and many other old and current aircraft are on display. Some even offer the visitors a chance to experience the aircraft's inside. Unfortunately, all the around 80 exhibits and interactive displays are in the open and the condition of most of the aircraft has suffered from the effects of the weather. Nevertheless, this museum is a must for every aviation enthusiast who is interested Soviet aviation.

From left to right

- Tupolev Tu-22M-2 *Backfire B*, long range bomber
- Tupolev Tu-22M-3 *Backfire C*, long range bomber
- Tupolev Tu-134UBL *Crusty*, combat trainer
- Tupolev Tu-142 VPM4 *Bear F* long range ASW



Tupolev Tu-142 VPM4 Bear F long range ASW



▼ Antonov An-2 and Mil Mi-8 *Hip-H*



▼ Sukhoi Su-15 TM *Flagon-F*



▲ Mikoyan-Gurevich MiG-19 PM *Farmer*



▲ Mil Mi-14 PL *Haze*



▼ Sukhoi Su-25 *Frogfoot*

▲ Mikoyan-Gurevich MiG-29 *Fulcrum*



▼ Sukhoi Su-7B *Fitter A*

▲ Mikoyan-Gurevich MiG-17 *Fresco-A*



▼ Mikoyan-Gurevich MiG-25RB *Foxbat B*

▲ Mil-Mi 6A *Hook*





▼ Mil Mi-6 Hook

▲ Kamow Ka-27 PL *Helix A* (left) and Kamow Ka-25 *Hormone* (right)



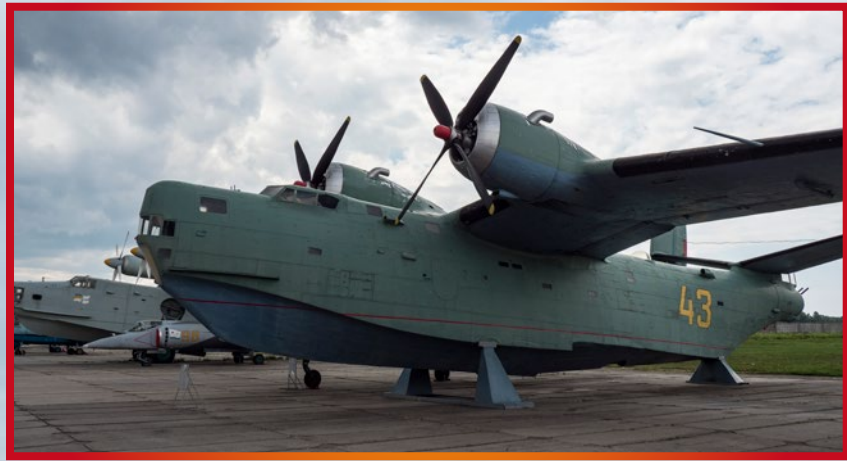
▼ Cockpit of the Mil Mi-26 *Halo*

▲ Mil Mi-8T *Hip*



▼ Mil Mi-26 *Halo*





- Beriev Be-6 Madge (inset top left)
- Ilyushin IL-76T Candid (inset top right)
- Antonov An-30 Clank (inset bottom left)
- Antonov An-71 Madcap (inset bottom right)
- Beriev Be-12 Mail (main image)

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