

# THE AVIATION MAGAZINE

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No. 59 September - October 2018  
Volume 9, Issue 7



- ✈ Wings Over Illawarra - The Sydney Airshow, Australia
- ✈ Mountain Home AFB Air Show, Idaho, USA
- ✈ Red Bull Air Race, Budapest, Hungary
- ✈ The Retirement of the Mirage 2000N, France
- ✈ The Age of Propellers - La Ferté-Alais, France
- ✈ And so much more...





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# THE AVIATION MAGAZINE

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No: 59 September - October Volume 9, Issue 7

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Cover: Matt Hall and Michael Goulian over Budapest by Joerg Mitter / Red Bull Content Pool

Index page: Bristol F2B at La Ferté-Alais by Paco Jover



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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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[info@TheAviationMagazine.com](mailto:info@TheAviationMagazine.com)

**Publisher:** AirShowsReview LLC.  
László Nyáry, Founder

**Editor:** Ralf Peter Walter  
[editor@TheAviationMagazine.com](mailto:editor@TheAviationMagazine.com)

**Contributing Team members:**  
Peter Thivessen  
Wolfgang Jarisch  
Christopher Mifsud  
Geoffrey Arnwine  
Katherine and Brian R. Veprek  
Joe "Chili" Ciliberti

**Occasional contributors:**  
Jason Phelan  
Jeroen Oude Wolbers  
István Kelecsényi



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Welcome to our 59th issue and my first issue as the editor of THE AVIATION MAGAZINE. Reports on air shows in three continents, military exercises, the retirement of the Mirage 2000N and last but not least this year's Red Bull Air Race in Budapest, Hungary — this issue, again, brings to you all the fascination of aviation. The next issue will be no less interesting. We will report on the deployment of Lockheed Martin F-22 Raptors to Spangdahlem AFB in Germany, a visit to the U.S. Naval Air Station Whidbey Island, the Royal International Air Tattoo in England and much more.

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

Ralf Peter WALTER  
Editor

Feel free to e-mail me any time: [editor@TheAviationMagazine.com](mailto:editor@TheAviationMagazine.com)

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General Dynamics F-16AM



de Havilland Canada DHC-5 Buffalo



Northrop Grumman E-2D Advanced Hawkeye



Saab JAS 39 Gripen C



Boeing F/A-18F Super Hornet



# WINGS OVER ILLAWARRA THE SIDNEY AIRSHOW

Report and photography by Jeroen Oude Wolbers

The 2018 edition of the annual Wings Over Illawarra / The Sydney Airshow took place on 5 and 6 May 2018 at Illawarra Regional Airport, New South Wales, Australia. The Aviation Magazine visited this event on Saturday 5 May 2018 only.

Under blue skies a record breaking crowd witnessed an impressive line up of aircraft on static display and a varied flying program - a mix of current Australian Defense Force hardware, warbirds and aerobatic displays.

## Flying display

The active runway is relatively close to the crowd line, making it ideal for take off, landing and taxiing shots – at least in the mornings, as in the afternoon it is backlit. Add the warm weather - unfortunately causing heat haze - and photography became a rather challenging job...

## Australian Defense Force

Although not part of the official flying program, one of the first interesting movements of the day was the arrival of the Chief of the Defense Force, Air Marshal Mark Binskin in a Challenger 604 from 34 Squadron / RAAF Base Fairbairn as part of the static display. The six hour long flying display was opened at 10.30am by *The Roulettes*, the Royal Australian Air Force display team, flying the Pilatus PC-9A. Australian Defense Force flying displays continued throughout the day with the MH-60R Seahawk from 816 Squadron / HMAS Albatross, the F/A-18A Hornet from 2 Operational Conversion Unit / RAAF Base Williamtown, the C-27J Spartan from 35 Squadron / RAAF Base Richmond, the C-17A Globemaster III from 36 Squadron / RAAF Base Amberley and the Hawk Mk.127 from 76 Squadron / RAAF Base Williamtown.







▲ Beechcraft C-45 Expeditor



▲ Sikorsky MH-60R Seahawk

▼ Challenger 604

▼ Agusta Westland AW139



### Ross Pay's Commonwealth Aircraft Corporation CA-18 Mk.21 Mustang

This aircraft, VH-AUB / former A68-107, is one of Australia's oldest warbirds, having been restored and registered by (Colin) Pay's and put on the Australian register in 1980. The aircraft was previously in private hands from 1958 to 1966 with Titus Oates. One of the finest American fighter aircraft of World War II, the North American Aviation P-51 Mustang owed its origin to a Royal Air Force specification for a single-seat fighter to replace the Curtiss P-40. The original 1,150 HP Allison engine lacked performance at high altitude and the Royal Air Force employed the early Mustangs on low-level armed tactical reconnaissance sorties. Meantime, the United States Army Air Force ordered a limited number of P-51s and P-51As to operate in the dive-bomber role. However, once the basic P-51 design was mated with the proven Rolls-Royce Merlin engine, the aircraft became an enormous success. Through P-51B, C and D models, the Mustang was just as capable at long-range escort as short ground-attack sorties. In 1943, the Australian government arranged for the Commonwealth Aircraft Corporation to manufacture the Mustang P-51D under licence from North American Aviation. The first eighty Mustang Mk.20 (A68-1 – A68-80) were delivered with Packard Merlin V-1650-3 engines, under the CA-17 designation. A second contract for improved Mustangs known as CA-18 were built as Mustang Mk. 21 with Packard Merlin V-1650-7 engines. Produced too late for World War II, Royal Australian Air Force Mustangs were assigned to Japan for occupation duties and, early in 1946, 76, 77 and 82 Squadrons flew into Iwakuni. In 1949 76 Squadron and 82 Squadrons withdrew to Australia and the Mustangs of 77 Squadron remained to take part in the Korean War from June 1950 until April 1951, when they were replaced by Gloster Meteors. In Australia, Mustangs were withdrawn from service in 1959. This aircraft was registered to the Royal Australian Air Force in 1947 and served for eleven years. In 1978 it was acquired by Col Pay.



### Ross Pay's 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. Following a full inspection and survey of the aircraft, the decision was taken to send the fuselage to Matt Webber and the team at Luskintyre Aircraft Restoration to have the fuselage woodwork refurbished and new cloth added to the fuselage. The work was extensive, with the rear upper cockpit framing rebuilt including new stringers on the fuselage. A new fabric "bag" was then fitted to the fuselage and then the doping of the fabric and finally the painting of the structure followed. After the return of the fuselage assembly to Vintage Fighter Restorations, a large program of work ensued to refurbish the rest of the aircraft including the hydraulic and electrical systems and any worn items were replaced. The wings were fully inspected and made ready for repaint. The aircraft's Rolls Royce Merlin 500/224 engine was found to be in excellent condition and required very little attention other than maintenance. The engine remains in the red colour finish of a previous restoration in the United Kingdom with the belief that it will be easier to determine the source of oil or coolant leaks. 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. Its first flight in Australia was 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

### Temora Aviation Museum's Spitfire Mk. VIII

This aircraft, VH-HET / former A58-758, was the last Spitfire acquired by the Royal Australian Air Force. 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 aircraft 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.

### Static Display

Static displays included Australian Defense Force's F/A-18A, Hawk Mk.127, Bell 429, EC-135T, MRH-90 and S-70A Blackhawk, the local Historical Aircraft Restoration Society collection amongst other general aviation aircraft. Unfortunately photography was nearly impossible.

### Acknowledgements

Jeroen Oude Wolbers and The Aviation Magazine would like to thank the organizers of Wings Over Illawarra 2018 / The Sydney Airshow, Bright Events and in particular Steve Visscher, Australian Defense Force, Temora Aviation Museum and Vintage Fighter Restorations.



◀▲ Supermarine Spitfire Mk. VIII

Aero L-39C Albatros ▼





McDonnell-Douglas F/A-18A Hornet



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# MOUNTAIN HOME AFB

REPORT AND PHOTOGRAPHY BY GEOFFREY ARNWINE



On June 2-3, Gunfighter Skies 2018 took place at Mountain Home Air Force Base, Idaho. This event celebrated the 75th Anniversary of the base and the 30th Anniversary of the F-15E Strike Eagle which is stationed there. Highlighting the airshow was the U.S. Air Force Thunderbirds, F-22 Raptor Demo Team, and much more. Unfortunately, on Saturday, the remainder of the show was cancelled after Dan Buchanan was tragically killed in an accident in his Special Effects Hang Glider. The show returned Sunday and paid tribute to Dan.

Gates opened at 8:30 am both days. Spectators had the opportunity to visit the multiple static display aircraft and exhibits on the ground. Among those static displays were rare foreign military aircraft including two F-16 Fighting Falcons from Belgium, a C-130 Hercules from Australia, and an F-15SG Strike Eagle from Singapore which is stationed at Mountain Home for pilot training.

Flying activities officially kicked off at 10:30 am with the singing of the National Anthem with a jump by the Wings of Blue Parachute Team. Following the jumpers, a 4-ship formation of F-15E Strike Eagles flew over a stunning wall of fire.

After the opening ceremonies, Team Mountain Home showcased a simulated joint assault demonstration featuring the four F-15Es that flew over and two A-10s from the Idaho Air National Guard out of Boise. The demonstration featured many incredible maneuvers including high speed passes and lots of flare drops. Another major Air Force highlight of the show was a tactical demonstration by the Boeing C-17 Globemaster based out of Altus AFB, Oklahoma. The C-17 showcased multiple capabilities

of the aircraft including a short runway takeoff and tight turns.

The show also featured a nice variety of aerobatic performances. Those included Brad Wursten in his MXS-R monoplane who performed with Dan Buchanan prior to his fatal accident, Nathan Hammond in his Super Chipmunk, and Steve Bennett in his Christen Eagle biplane.

F-15E Strike Eagle



Perhaps the most spectacular of them all was Jeff Boerboon who piloted his rare Yak-110 twin aircraft. This plane made its airshow debut in Mountain Home and featured a jet engine in the middle with two Yak-55 fuselages.

There were a couple great warbird performances in the air including Tora Tora Tora. Tora Tora Tora is a reenactment of the Japanese attack on Pearl Harbor and featured multiple warbirds painted to replicate Japanese fighters and bombers. The simulation included a bunch of pyro and low level attack passes by the aircraft. Mark Peterson also performed an aerobatic routine in his North American P-51 Mustang known as "Hell-Er Bust".

Making its debut in the state of Idaho was the U.S. Air Force F-22 Raptor Demonstration Team from Langley AFB, Virginia. The F-22 was piloted by Maj. Paul "Loco" Lopez and featured multiple super maneuver capabilities of the aircraft including tight turns, tail slides, and power loops. Following the solo display, Maj. Lopez teamed up with a P-51 Mustang for the Heritage Flight. The Heritage Flight is a rare formation of fighter aircraft past and present that commemorates the history of the U.S. Air Force.

Concluding the flying activities was the United States Air Force Thunderbirds. The team, lead by Lt. Col. Kevin Walsh, featured a wide variety of maneuvers including multiple formation flights, solo head on passes, and crowd tingling sneak passes. After the aerial demonstration, the team walked

over to the crowd line to meet fans and sign autographs.

After the conclusion of the flying, spectators were able to continue viewing the multiple static displays and ground exhibits before gates closed at 5 pm.

Special thanks to the volunteers, spectators, performers, sponsors, and Team Mountain Home for making Gunfighter Skies 2018 a success!



- ◇ A-10C Thunderbolt, main picture
- ◇ F-22A Raptor, top
- ◇ F-15E Strike Eagle, above



- ◇ F-22A and P-51D, main picture
- ◇ Yak-110 twin aircraft, top right
- ◇ MXS-R aerobatic aircraft, far right
- ◇ C-17, right

# TORA! TORA! TORA!



◇ Consolidated Vultee BT-13A, top  
◇ North American SNJ-5 Texan, above

North American SNJ-5 Texan

◇ North American P-51D Mustang, top  
◇ North American P-51D Mustang, above





Martin Sonka of the Czech Republic performs during the finals at the fourth round of the Red Bull Air Race World Championship in Budapest

The 4th air race of the Red Bull Air Race World Championship series was held in Budapest, Hungary on July 23-24. The race is very unique in Budapest, apart from the fact that it is held in the heart of this very beautiful scenic city, over the Danube River the pilots have to fly under the Chain Bridge to start their race. Hungary's own Péter Besenyei, a Red Bull Air Race legend who was instrumental in pioneering the sport, won the Budapest race in 2003. It was he who first flew under the Chain Bridge to prove the concept.

Massive crowds, 135,000 spectators, occupied both banks of the Danube River and thousands of Czech fans among them ecstatically watched as Martin Šonka took his first "MASTER" win of the season. France had much to celebrate on Sunday as well, when the young Frenchman Mika Brageot earned his career-first race podium in second, and in third place, Matt Hall of Australia tightened his grip on the top of the World Championship standings. Unfortunately, Pete McLeod from Canada was disqualified for pulling to many Gs during his first round in the race.

The race consists of two different classes: Challenger Cup and MASTER. The Challenger Cup was set up for the new and less experienced pilots, who by winning the year-long series of races, have a chance to move up to the MASTER class.

To entertain the crowds before the race started, there was an air show which included a flyby of a Hungarian Air Force's MI-8 Helicopter, two JAS39 Gripen, Airbus A319 and C-17 Globemaster III, several aircraft owned by the Red Bull such as the B-25, T-28, Alphajet, and of course a flying demo by Péter Besenyei.

WORLD CHAMPIONSHIP STANDINGS				TOTAL	Abu Dhabi UAE	Cannes FRA	Chiba JPN	Budapest HUN
RANK	NAME	NAT	TEAM					
1	Matt HALL	AUS	Matt Hall Racing	45	6	15	15	9
2	Michael GOULIAN	USA	Team Goulian	43	15	9	12	7
3	Martin SONKA	CZE	Red Bull Team	34	7	3	9	15
4	Mika BRAGEOT	FRA	#11Racing	27	3	6	6	12
5	Yoshihide MUROYA	JPN	Team Falken	19	12	7	0	0
6	Matthias DOLDERER	GER	Matthias Dolderer	15	0	12	3	0
7	Francois LE VOT	FRA	FLV Racing Team	15	4	0	5	6
8	Pete MCLEOD	CAN	Team McLeod	11	0	4	7	0
9	Kirby CHAMBLISS	USA	Team Chambliss	10	9	0	0	1
10	Juan VELARDE	ESP	Team Velarde	9	0	5	4	0
11	Ben MURPHY	GBR	Blades Racing	9	5	1	0	3
12	Petr KOPFSTEIN	CZE	Team Spielberg	8	2	2	2	2
13	Cristian BOLTON	CHI	Cristian Bolton	6	0	0	1	5
14	Nicolas IVANOFF	FRA	Team Hamilton	5	1	0	0	4

Filmstrip: Péter Besenyei, Mika Brageot, Yoshihidi Muroya, Ben Murphy, Nicolas Ivanoff, Matt Hall and Francois Le Vot.



Photo by Predrag Vuckovic / Red Bull Content Pool.



All images on the page by István Kelecsényi



Péter Besenyei in his Corvus Racer 540 thrilling the spectators



Some of the Red Bull air show participants thrilling the crowds above and below the Alphajets

Photo by Predrag Vuckovic / Red Bull Content Pool.



Matt Hall during the race by the Parliament Building in Budapest, above Mika Brageot (2nd), Martin Šonka (1st), and Matt Hall (3rd) below

Photo by Armin Walcher / Red Bull Content Pool.



Photo by Joerg Mitter / Red Bull Content Pool.



Photo by Predrag Vuckovic / Red Bull Content Pool.

# APROC 2018

## *THAT OTHERS MAY LIVE*

Report and photography by Ralf Peter Walter

Today, the recovery of isolated personnel using a wide range of air assets usually takes place in a multi-national environment. In order to be efficient, effective and successful, conducting recovery missions composed of team members and equipment from different nations requires continuous training.

From 23 May until 7 June, the European Personnel Recovery Center (EPRC) held this year's Air-centric Personnel Recovery Operatives Course APROC at the Dutch Main Operating Base of Gilze-Rijen.

The primary aim of APROC is to educate and train:

- Aircrews that have little or no experience in planning and conducting complex missions based on a PR scenario. Complex as in multi-national, multi-ship, dissimilar type aircraft;
- Experienced pilots to become Rescue Mission Commander through learning to lead the planning and execution of complex missions and brief and de-brief the mission to the task-force and higher commander;
- Extraction Forces leadership to fully participate in the planning of complex missions based on a personnel recovery scenario.

The secondary aim is to educate and train:

- Airborne Early Warning crews to become proficient as Airborne Mission Coordinator;
- Rescue Escort crews to act as proficient On Scene Commander;
- Extraction Forces to apply standards to recover isolated personnel and provide medical care to them as required.





#### **NATO definitions**

- The capture of NATO personnel and the exploitation by a hostile actor during operations could have a significant negative impact on operational security, morale of assigned forces and public support. The Alliance therefore requires a system to recover military and civilian personnel that have become isolated.
- Personnel Recovery: the sum of military, diplomatic and civil efforts to effect the recovery and reintegration of isolated personnel.
- Isolated personnel: military or civilian personnel, who are separated from their unit or organization in a situation that may require





Gulfstream G550 CAEW, ItAF



F-16AM Fighting Falcon, RNLAF



EF2000 Typhoon, ItAF





▲ AS555AN Fennec of the French Air Force

NH-90 NFA Caiman of the French Navy ▼



▲ EH101-410UTY Merlin of the Italian Navy

AS332B1 Super Puma of the Spanish AF ▼





▲ HC-3A Merlin of the Royal Navy



▲ HH-101A CAESAR of the Italian Air Force

Mi-24V Hind of the Polish Air Force ▼



Hkp 16A Black Hawk, Swedish Armed Forces ▼





#### **EPRC mission**

To improve the four phases of Personnel Recovery (Preparation, Planning, Execution and Adaptation) by developing/harmonizing PR Policy, Doctrine and Standards through clear lines of communications with partners/stakeholders (nations and international organizations) and provide assistance in support of education and training, exercises and operations as required.

The Aviation Magazine wishes to thank Ms Claudia van Hoek of the Defensie Helikopter Commando and Lt. Col. Bart Holewijen of the EPRC.

# THE RETIREMENT OF THE MIRAGE 2000N

A tribute to my friend who flew the Mirage 2000N by László Nyáry with help of Paul Basque and photography as noted



## Nothing lasts forever, soldiers, pilots and aircraft retire and just fade away...

On June 21st at the Istres-Le Tubé Air Base, aka Base Aérienne 125 or BA 125, the Armée de l'Air, the French Air Force, retired their Mirage 2000N strike aircraft. The Mirage 2000N was part of the Forces Aériennes Stratégiques, FAS, who are in charge of the deployment of nuclear weapons since January 14, 1964.

The world famous Escadron de Chasse 2/4 *La Fayette* who flew the Mirage 2000N since 1988 is converting to the Rafale B. The fighter squadron will move and consolidate at the Saint-Dizier – Robinson Air Base in order to optimize training and logistics. Forward operating locations for dispersion of nuclear-armed Rafale flights will be retained at other air bases in line with the French redundancy practice to prevent taking out the aerial nuclear arm with a single massive strike.

The Aviation Magazine had the rare privilege to visit Istres-Le Tubé AB in 2013, see our report here: <http://www.theaviationmagazine.com/Magazines/June-July2013TheMagazine.pdf> and meet Ramex Delta, the Tactical Strike Demo Team of the FAS, part of the EC 2/4 *La Fayette*. We also had several chances to meet Ramex Delta at various air shows in Europe while they were active.



A fly-by led by the C-135FR with the special 2000N, flanked by two EC 2/4 2000Ns flanked by two 2000D aircraft of the Couteau Delta and two Rafale B in the middle.

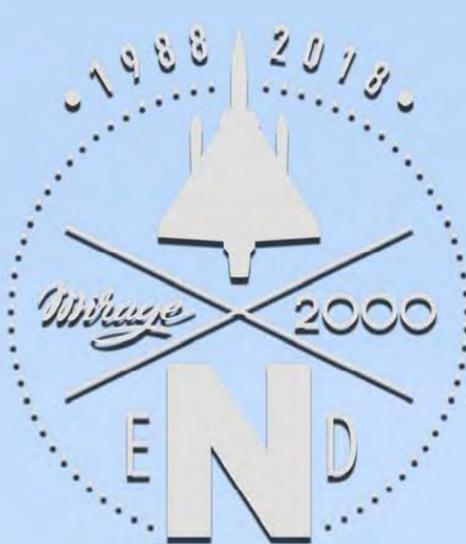


© László Nyáry <http://www.aircraftprofilesbylaszlo.com>

## MIRAGE 2000N

The Mirage 2000 was developed from single-engine fourth-generation jet fighter manufactured by Dassault Aviation. It was designed in the late 1970s as a lightweight fighter to replace the Mirage III for the Armée de l'Air. There are several variants of the Mirage 2000, namely the 2000D which is a conventional attack and the 2000N, the nuclear capable strike aircraft.

The Mirage 2000N is based on the Mirage 2000B two-seat trainer, with a multitude of changes. The airframe was strengthened for low-level flight and fitted with an Antilope 5 radar, which is used for terrain following, navigation and ground mapping, and which can follow terrain at 1,112 km/h (691 mph). Other avionic features are twin INS units and moving map displays for both the pilot and weapon systems officer. The Mirage 2000N K-3 can carry one ASMPA medium-range nuclear missile on the centerline pylon and can also carry two MATRA Magic AA for self-defence and with other protection features such as electronic jamming and chaff/flare systems. One of the distinguishing features is the bulbous nose on the two 2,000 litre



The Mirage 2000N with the Armée de l'Air has an interesting operational history.

First loss in operation for a Mirage 2000N (No. 346, 3-JD) was when it was shot down by the Bosnian Serbs on 30 August 1995, near Pale. The crew was taken prisoner and eventually released.

In 2008 President Sarkozy announced a reduction of the French nuclear arsenal by one third, the Armée de l'Air paid the price. First the 1/4 *Dauphiné* squadron was dissolved two years later, followed shortly after by the 3/4 *Limousin*. At the same time, and as the ASMP-A (Advanced) began to endow the Rafale B, squadron 1/91 *Gascogne* took the nuclear gauntlet at Saint-Dizier AB in 2009. The goal being, for the FAS, to move to all Rafale platform.

The Mirage 2000N took part in most of the foreign operations conducted by France (Crécerelle, Harmattan, Serval, Barkhane, Chammal). In 2017, this aircraft had a final deployment to N'Djamena, (Chad) under Operation Barkhane. Thursday, September 28, 2017, an accident occurred immediately after take-off of a Mirage 2000N at the French military base of N'Djamena (Chad). The two crew members of the 2/4 *La Fayette* squadron were able to eject the aircraft in time which crashed during the take-off phase. The aircraft was a total write-off.

As the Rafale B with the ASMP-A conversion ramped up only 22 Mirage 2000Ns remained in service with the 2/4 *La Fayette* as the last 2000N squadron.

The last official flight of the Mirage 2000N, will be on July 14th at the Champs-Élysées, parade.

Four Mirage 2000N will become gate guards, one of each, at Luxeil, Nancy, Istres and Mont de Marsan Air Bases at the end of the summer. The rest of

## The Ceremony:

The public was allowed to enter the air base at 1:30 pm and to watch the ceremony that started at 2:30 pm. The weather was very warm. The ceremony was directed by the Major General Olivier Taprest Deputy Chief of Staff of the Air Force, General André Lanata, Chief of Staff of the Air Force was also in attendance, which definitively marked the Mirage 2000N, after 30 years of service. During the ceremony all the squadron flags were displayed which flew the M2000N (about 15) from Nancy, Luxeuil and Istres Air Bases. The scene was quite solemn when medals were given out to some of the staff, crew and mechanics of the squadron for the last military operation in which the M2000N took part in. Crews were honoured and remembered who lost their life flying this aircraft.

The scheduled air show for 3:30 pm was delayed due to birds in the airspace for the demonstration until 5:00 pm. The air show included the specially painted 2000N (repainted by Régis Rocca, famous civil designer working Armée de l'Air with the help of airmen of Istres and Luxeuil) which flew with the Patrouille de France.

The air show in order: Alpha jet solo started it, then the Rafale solo, farewell flight with a C-135FR, a specially painted M2000N, two M2000N flown by former Ramex Delta pilots and a couple of Rafale Bs. The 2000Ns of the 2/4 *La Fayette* did some tactical manoeuvres then they were followed by the Cousteau Delta, then the Patrouille de France (PAF) and M2000N in special livery for the homage flight, then the M2000N special livery solo flight and enclosing the air show the PAF once again by themselves at 6:00 pm.

There was invitation only celebration and dinner with the officials.

The belly of the M2000N special livery below and in formation with the 2000Ns of the 2/4 *La Fayette* and the Patrouille de France right page.





©2018 Charles-Henry Ansart



©2018 Paul Basque

Two M2000N flown by former Ramex Delta pilots above, the Couteau Delta in their Mirage 2000D below, and M2000N special livery landing at the end of the air show, top right.



©2018 Paul Basque



Special patches for the occasion



# BRAY AIR DISPLAY

Report and photography  
by Jason Phelan



CASA CN235M of the Irish Air Corps

Bray Air Display, which was held over the weekend 28<sup>th</sup> & 29<sup>th</sup> July 2018, is now in its 13<sup>th</sup> year and growing in popularity. Bray Air Display is a free, family, fun-filled event and has won numerous awards including 'Best Festival / Event Experience over 50,000 people' at the prestigious Irish Tourism Industry Awards 2017 and silver in the 'Best Tourism Initiative' category at the All-Ireland Community and Council Awards 2018.

Up to 140,000 people attended this year's event and the enthusiastic crowd didn't allow the poor weather to diminish their enthusiasm. The hardy supporters were treated to solo and formation aerobatics from Classic Vintage WWII fighters, high powered aerobatic and jet aircraft from many countries including France, Sweden, Jordan, South Africa, United Kingdom and military and civilian acts from across the Republic of Ireland.

Highlights throughout the weekend included:

- The world famous Red Arrows, one of the most skilled and accomplished teams on the global circuit, headlined Bray Air Display on Sunday 29th July. Having moved their original slot time by an hour and half to allow for the weather and visibility to break, the team colored the display site with red, white and blue smoke to a very appreciative crowd.
- Paul Bonhomme & Steve Jones flying a simulated dogfight and exceptional close formation pairs routine in the P51 Mustang (Contrary Mary) and Hispano HA-1112-M4L Buchon from Air Leasing Ltd based at Sywell Aerodrome, UK.
- The Royal Jordanian Falcons displayed a new and dynamic routine for 2018 in their recently delivered Extra EA 330LX aircraft, demonstrating high energy aerobatics, crossover maneuvers and formation flying.
- The Irish Air Corp displayed a multitude of aircraft on charge, with Role Demos and Close Formation Aerobatics. For many, the sight of two CASA CN235 in a tight pairs display will stand out as the Air Corps contribution highlight.



- DC-3 Dakota displaying the original livery of a 1940s Aer Lingus aircraft of that era and gracing the skies of Bray for the second year.
- Patrouille Tranchant returned with their V-tailed Fouga Magisters bringing together the Celtic connection with Ireland and emitting colored smoke to fly the Tricolour of the Irish flag.

Peter Kearney, Chief Executive of the Irish Aviation Authority said, "We have seen some spectacular displays of aviation skill and talent this weekend at both the Foynes Air Show in Limerick and the Bray Air Display. I hope this Aviation Ireland weekend has shone a spotlight on the wealth of aviation talent in Ireland and encouraged many to follow their dreams of an aviation career. The IAA are delighted to have supported such a successful weekend."

Sé Pardy, Director, Bray Air Display, said, "We held our nerve and the sun made a very welcome appearance just in time! Thanks to everyone who made their way to Bray this weekend to enjoy the show - we really appreciate all the support. A big thank you also to our main supporters the IAA as well as Wicklow County Council and all the volunteers who make the weekend such a success. Looking forward to seeing everyone next year!"

The main supporters of the Bray Air Display are the Irish Aviation Authority (IAA) as part of its AviationIreland campaign to promote aviation across the State. The IAA also supported the Foynes Air Show which took place on Saturday 28th July in Foynes, Co. Limerick. The AviationIreland week end aims to highlight Ireland's position as a true global aviation hub and as a nation of aviators and innovators.

Thank you to the Bray Media Team Louise Cassidy and Paul Carney for their help and to Rebecca McKenna and Sé Pardy .



- Patrouille Tranchant with Fouga CM.170 Magister, main image
- Douglas DC-3, right top
- Consolidated PBY5A Catalina, right middle
- Boeing Stearman, right bottom

P-51 Mustang and Hispano HA-1112-M4L Buchon



→ 3A

4

SAAB Viggen, Swedish Historic Flight



→ 2a

3

Pilatus PC-9M, Irish Air Corps



→ 1A

2

EC135T2, Irish Garda Air Support Unit



→ 5A

6

Sikorsky S-92A, Irish Coast Guard



→ 6A

AW139 and EC135P2, Irish Air Corps



5



# La Ferté-alaiz

Report and Photography by Paco Jover



T-6 Texans simulating the Japanese attack on Pearl Harbor, December 7, 1941

On June 19th and 20th, the annual air show of "The Age of Propellers" (Le Temps des Hélices) was held at the airfield La Ferté-Alais in France. It was the 46th edition and it was dedicated to the end of the First World War a 100 years ago.

The airfield is located 60 km south of Paris. It's a grass airfield surrounded by forest and it's the base of the Amicale Jean Baptiste Salis (AJBS), the association in charge of the air show organization and owner of most of the aircraft flying in the event. Other associations like "Casques de Cuir", "Memorial Flight" or "The Fighter Collection" participated in the air show.

In "The Age of Propellers", there are planes from the earliest flying machines made of wood and fabric to the most recent ones, built with metal and composite materials.

The ambiance and atmosphere is purely aviation. During the morning spectators could visit the static display with all the planes based at the airfield along with jets, display teams and heavies from other bases in France and Switzerland. In the afternoon, the eyes were focused to the sky. The flying program was almost the same on Saturday and Sunday.

Several flying jewels like the Bleriot XI, Deperdussin and Morane type H represented the pioneers of aviation, low speed and funny flight.

One of the stars of the air show was the Hispano HA-1112-M4L "Buchón" Red 11 (number painted on the fuselage). With its two-seat configuration and four-bladed propeller it is a unique piece. This aircraft was built in Seville (Spain) in 1954, powered with a Rolls Royce Merlin. It was flown by the World War II Luftwaffe ace Adolf Galland during the movie "The Battle of Britain". After filming it was stored in Texas for years and recently was moved to UK and restored. It was the first display in an air show.

Another highlight was the first flying display of the Vought F4U-5N Corsair (MSN 124724, French reg-



- Junkers Ju-52-3M, main image
- Supermarine Spitfire FR Mk.XIV, right top
- Vought F4U-5N Corsair, right middle
- Curtiss P-40N-5-CU Warhawk, right bottom



istration F-AZEG) of the "Casques de Cuir", after a ten-year restoration. It was built in 1951 and served with the US Navy before being bought by the Honduras Air Force, serving during the "Soccer War". The Corsair came to France in 1986. The power plant is a Pratt & Whitney R-2800-18W and the colour scheme is the one of the VC-3 Night Fighter Squadron, USS Princeton. The pilot was Baptiste Salis.

Talking about jets and fighters, the display of the Swiss Air Force F/A 18C was amazing with some high speed manoeuvres, low passes and always showing the great performance of this fighter. The F/A 18 flew in formation with a Morane Saulnier MS 406, the only one in flying condition. Not an easy flight formation due to the very different speeds of the aircraft.

The Breitling Jet Team with six Czech made L39C Albatros, a twin-seater military trainer, flew on Saturday only. The world's largest civilian flight team performing on jets is based in France, Jacques "Speedy" Bothelin is the manager and team leader and one of the most experienced aerobatics pilots with more than 11.500 flight hours on 145 types of aircraft.

The Sunday was the moment of the Patrouille de France of the French Air Force, well known in the U.S. after their 2017 tour across the U.S. sharing air shows and experiences with Thunderbirds and Blue Angels. Eight blue, white and red Alpha Jet planes flying in close formation and also solo impressively showed the skills of the pilots of the French Air Force.

Tora Tora is the name of the display simulating the attack on Pearl Harbor with twelve T6 Texan attacking the airfield. One of the T6 was modified and set up like a Japanese Zero. The speaker, Bernard Chabbert and pyrotechnics helped to recreate the ambiance of the morning of December 7, 1941.

Gliders, replicas, vintage airplanes, helicopters, airliners, warbirds, aerobatics, jet fighters, wingwalkers, parachutists, military aircraft, WWI, WWII - this, and more, is La Ferté-Alais.

- Caudron G III (replica), top left
- Fokker DR.1 (replica), top right
- Spad XIII (replica), middle right
- Albatros C2 (replica), bottom right





- Hispano HA-1112-M4L, main image
- Fieseler Fi-156C-3 Storch, top
- Hawker Sea Fury T.20, above
- North American AT-6D, far left
- Curtiss Hawk H-75A-1, mid left
- North American T-28B Trojan, left

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- Patrouille de France, Alphajet, top left
- French Air Force Extra 330 SC, top right
- Breitling Jet Team, Aero L-39, middle left
- Douglas AD-4N Skyraider with North American OV-10 Bronco, above
- Swiss Air Force F/A18C Hornet with Morane-Saulnier D-3801, left



# S TORRI - ALPINE EXERCISE

REPORT AND PHOTOGRAPHY BY TOMMASO MUNFORTI





In one of the most beautiful places all over the Alps, in the middle of the Dolomiti Mountains, just in the neighborhood of the 5 Torri over Cortina, (5 rock Towers Mountain), the traditional training of Italian Army mountain troops, Alpini, was conducted on July, 4th.

The exercise demonstrates the mountain warfare capability of Italian mountain troops at the end of their annual training campaign.

In the first part, focused to show the mountaineering skills acquired, the east side of the 5 Torri has been climbed by more than 200 soldiers coming from all Alpini's units (Brigades Julia and Taurinense, Centro Addestramento Alpino, Comando Truppe Alpine "Tridentina"). Joined by different groups from Italian Navy Special Forces, Italian Military Police and teams or observers from 14 allied and friend countries, this clearly proofed the international interest in this special event.

Just after the last team of climbers reached the top of the mountains, a tactical demonstration was performed on the West side of the Towers. In this phase, the mountain troops, with close air support by two AMX jets of the Ital-

ian Air Force and helicopters of the 4<sup>th</sup> and 5<sup>th</sup> Regiments of the Aviazione dell'Esercito (Italian Army Air Force), simulated a mountain warfare scenario by attacking and conquering an enemy position at the location of the WW I Italian artillery headquarter.

In such an amazing landscape, it was very impressive to see helicopters perform combat maneuvers at a very low level and close to the vertical side of the mountains.

The constant training to operate in such a special and difficult environment allows the Italian Army to take part and support civil organizations in mountain search and rescue missions. A dual use capability which was impressively demonstrated during the day with different rescue demonstrations — with and without helicopters and also in cooperation with units of National Mountain Rescue Organizations.



◀ AgustaWestland/Boeing ICH-47F

▲ Agusta AB205A (ESC-3)  
▼ NH Industries UH-90A





Agusta A129C, top  
ICH-47F and A129C, main image



▲ Agusta AB205A (ESC-3)

▼ NH Industries UH-90A



# MEETING DE L'AIR

BASE AÉRIENNE 105 ÉVREUX-FAUVILLE, FRANCE

Photo-report by Peter Thivessen



In 2018, the French Air Force selected the air bases Nancy-Ochey and Evreux-Fauville for the Meeting Aérien to present themselves to the public. The public air show took place on Saturday and Sunday, whereas Friday was a spotter's day. Positions close to the runway provided excellent opportunities to take photos of the aircraft arriving and the pilots practicing their display for the air show.

Unlike many other European air shows, the French Air Force set up the flying program with its own aircraft to a large extent. However, Spain sent two EF-18 and Germany an EF2000 and an Airbus A400M, all for the static display. The Belgian Air Force participated with the F-16 Solo Display in the flying display.

The Aviation Magazine Media expresses our thanks to Cdt Hervé Portenseigne from FOSA (Fondation des Oeuvres Sociales de l'Air) for the excellent organisation.

The Base Aérienne 105 Evreux-Fauville is a French Air Force base located about 100 km northwest of the French Capital Paris. Evreux-Fauville is a major transport aircraft base and home to ET 01.062 *Vercors*, ET 03.062 *Ventoux* and EIE CN235M operating the CN235M, along with ET 02.064 *Anjou...feu!* and EIE 01.340 with C-160R. Also based at Evreux-Fauville are EEA 00.054 *Dunkerque*, flying the C-160G Gabriel electronic reconnaissance version of the C-160 and GAM 00.056 *Vaucluse* with DHC-6, EC225, EC725, C-160R and C-130H.





Aircraft of the French Air Force

- ◇ Alpha Jet E, above left
- ◇ Mirage 2000D, above right
- ◇ Rafale C, below left
- ◇ Mirage 2000-5F, below right



SA342M, French Army



CN-235M, French Air Force



NH-90TT, French Army



A400M, French Air Force



AS555AN, French Air Force



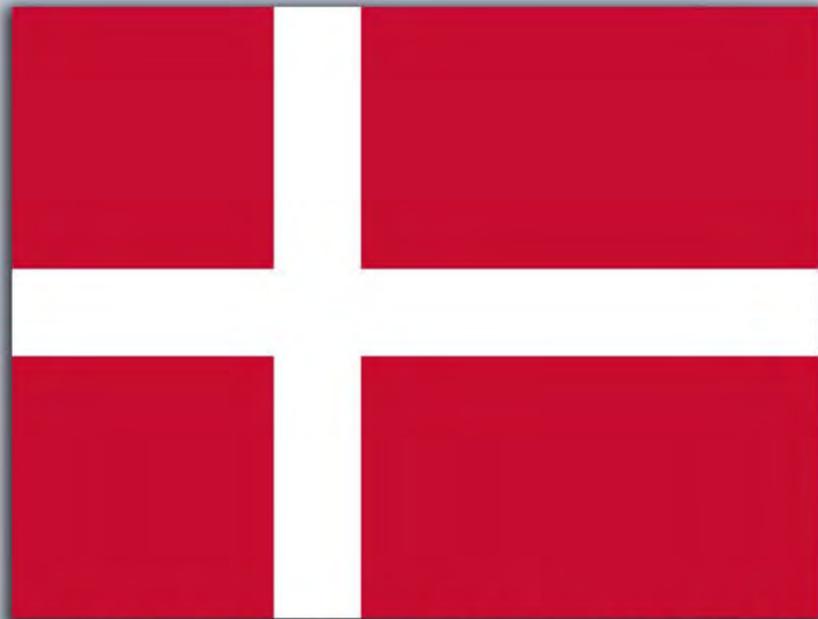
BR 1050, French Navy





Left to right

- ◇ F-16AM, Belgian AF
- ◇ Nord 2501
- ◇ EF2000, German AF
- ◇ DHC-6, French AF
- ◇ C-16OR, French AF
- ◇ EMB121AA, French AF



# DANISH AIRSHOW

ARTICLE AND PHOTOGRAPHY  
BY PAUL BASQUE

The Danish Air Show took place in capricious rainy weather. The event was organized by the Royal Danish Air Force, alternating between the three Danish airbases (Karup, Skrydstrup and Aalborg) every two years. After waiting for six years, this year, it was Aalborg's turn for the Danish Air Show.

Located in the North of the country, Flyvestation Aalborg is one of three bases of the Royal Danish Air Force. It shares its runway with the Aalborg Civil Airport of which the terminal is located south of the base. Aalborg is the home of Squadron 721 (Eskadrille 721), a transport squadron equipped with four C-130J-30 Hercules, three CL-604 Challenger and four Saab T-17 Supporter. It is in charge of the tactical transport of Danish troops as well as members of the Danish government and the Danish court thanks to its fleet of Challenger 604. These can also be equipped with an on-board surveillance radar placed under the belly of the aircraft. It also houses the Danish Special Forces unit, the Jægerkorpset. Until their decommissioning in 2006, the Aalborg base also housed Squadron 723 and Squadron 726. These two attack and reconnaissance squadrons, which are equipped with F-16MLU Fighting Falcon, were transferred to the Skrydstrup base.

Concentrated to a single day, it was dense and intense with activities. The program was busy, and despite the difficult weather conditions, almost the entire program was carried out. Only the fly-by of the KDC-10 of the Royal Netherland Air Force was cancelled.



Without a doubt the star of the show was the Norwegian F-104D above. The RDAF F-16AM below.



Saturday was reserved for rehearsals and Spotter Day. Open to the first two hundred registrants, seats were sold in less than 90 minutes, leaving many candidates out. The entire air show faced the (sun) light, not exactly great for the photographers. During rehearsals, a small group of spotters who were accepted on Saturday had the chance to move to the south of the runway for better light conditions.

Despite the air show, the airport activity was not stopped as the commercial flights took precedence, giving the spectators little (and only) breaks between the program. The flights took off and landed on the runway flanked by the spectators in mass.

Unquestionably, the main star of this meeting was the Norwegian F-104D which arrived on Saturday evening. The Norwegian F-104's arrival was eagerly awaited by the numerous spotters who came to admire the venerable "widower maker". This two-seater Starfighter is actually a Canadair CF-104D that served in the Canadian Armed Forces. Sold to the Norwegian Air Force in 1973, when the Canadians got rid of parts of their Starfighter fleet. The aircraft served with the 334 Squadron in Bodø before being withdrawn in April 1983 and stored at Sola Air Base. Later, the aircraft returned to Bodø where Air Force trainees used it for ground training until the early 1990s. Afterwards, the aircraft was exhibited in the Air Museum in Bodø until handed over to the association "Friends of the Starfighter", formed in January 2003. Since then, the association has been working to restore the F-104. They received help from the men of "Starfighters Aerospace", which currently commercially operates a small fleet of Starfighters on Merritt Island, Florida, as well as by the Aeronautica Italiana, which provided many missing pieces as they were the last to use the F-104 in service. In 2007, the first restart of the J-79 engine took place. A year later, the plane made its first taxi trials and in 2011, it received its official civil registration as LN-STF. In late 2017, the F-104D's first flight was expected and in 2018, its first demonstration outside of Norway, in Aalborg. All the spectators anticipated the distinctive spooling up whine and thunder of the J-79 and they were not disappointed.

The second main attraction was the Ukrainian Su-27 Flanker which arrived on Friday. The Ukrainian Air Force sent a pair of Sukhoi Su-27s with an Ilyushin Il-76MD support plane for the event. The Ukrainian presence in European aeronautical scenes, despite their on-going skirmishes on their Eastern border, was much welcomed. The Su-27s with their special blue camouflage stood out well against the Danish grey sky. The spectators had to wait until the end of the day to see the huge Soviet built twin-engined fighter rush on to the runway for take-off. The demonstration was good but well below the real capabilities of the Flanker, which was punctuated by a beautiful and huge flare drops.



Norwegian F-104D in the air above and landing below.





The Ukrainian Su-27 Flanker above and main right image. The Jægerkorpset — Danish Special Forces — demonstration that included the AS-550C-2 Fennec helicopter below.



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