Força Aérea Portuguesa or Portuguese Air Force – Part 1

he history of the Portuguese military aviation is deeply connected with the foundation of the Air Club of Portugal (AeCP) on 11 December 1909 by 30 aviation enthusiasts, the majority of them being Army officers. The AeCP became one of the major boosters of the development of aviation in Portugal, including its military use. The first flying unit was created in 1911 and named Companhia de Aerosteiros (Aerostation Company), which was part of the Army Telegraphic Service and were operating Air Balloons. In 1912, the first aircraft were received by the Portuguese Government, a Deperdussen B was offered by the Portuguese born Colonel Albino Costa of the Brazilian Army, a Maurice Farman MF4 was offered by the O Cormércio do Porto newspaper and an Avro 500 was offered by the Portuguese Republican Party. On 14 May 1914 the

Escola Militar de Aeronáutica, EMA (Military Aeronautics School) was created. On 17 July 1916, Lieutenant Santos Leite performed the first Portuguese military airplane flight in the Deperdussin B that had been offered in 1912. During World War I, Portuguese airmen volunteered to fly in French aviation units and Captain Óscar Monteiro Torres became the first Portuguese pilot that was killed in an air combat when his SPAD S.VII was shot down, after himself having shot down two German planes!



On 29 June 1918, the Serviço Aeronáutico Militar (Military Aeronautical Service) was organised which included the Composite Aviation Depot Flight (EMAD), the Aeornautical Material Park (PMA) and the Military School of Aviation. The EMAD was responsible to train pilots and observers and to prepare the creation of future air units and was initially installed at Alverca and transferred to Tancos, where an airfield was built to serve as its base. The PMA was installed at Alverca air base and was the

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precursor of the still existing OGMA aviation industry. On 7 February 1919 the Group of Aviation Flights República (GEAR), the first operational aviation unit was created. In 1920 the Military School of Aviation transferred from Vila Nova da Rainha to Granja do Marques, the site of what would become the still existing Sintra Air Base. In 1937 the Military Aeronautics underwent a major reorganisation and the air bases Sintra, Ota and Tancos were created followed by Lisbon in 1942.

Portugal was not directly involved in World War II but had to defend its neutrality and one of the major military priorities became the deterrence of a possible invasion of the strategic Azores Islands. Lajes airfield at the Azores Island became strategically crucial for the United States Military in future conflicts. In 1949 Portugal joined the North Atlantic Treaty Organisation (NATO) as own of its founders. On 1 July 1952 the Military Aeronautical Service was established as an independent branch and was called Força Aérea Portuguesa (Portuguese Air Force). The General Command of the Air Forces and the Directorate General of the Under–Secretariat of State were disbanded and being replaced by the Estado–Major da Força Aérea, EMFA (Air Force Staff).

In 1958 the FAP received its first North American F-86F Sabre jet fighters and on 24 September 1958 Captain Moura Pinto does the first Portuguese supersonic flight, by doing a dive with one of the Sabre's. In the late 1950s the FAP was partially foreseeing the conflicts in the Portuguese overseas territories and increased its effort to implement itself in those territories like Angola, Mozambique, Portuguese Guinee and Cape Verde in the early 1960s. On 4 October 1959 the important air base Monte Real is inaugurated and is from then till now the main operating base of the FAP's fighter aviation squadrons. The first stationing of jet training units were from the German Air Force. In 1964, also Beja air base was in use and in the beginning it was serving as a NATO forward naval air base.

From 1961 to 1975, the FAP was deeply engaged in theatres of war in Angola, Mozambique and Portuguese Guinee and mainly due to the international arms embargo to Portugal, the Air Force had to struggle with limitation of means, being obliged to extend the use of old aircraft or to employ aircraft that were not suited for the kind of warfare that was being fought. In September 1974 Portuguese Guinee was independent, followed by Angola in November 1975 and this led to the FAP to gradually withdraw from the several overseas territories. In 1974 the FAP had around 850 aircraft in its inventory and this was reduced to a third in 1976 with most of the old assets being phased out. A major reorganisation started in 1977, this included the creation of the national air command and also the Air Force

Academy was created. The reorganisation of the FAP was accompanied by its re—equipment, a lot of the ageing aircraft were replaced by newer aircraft. The process of the modernisation also included the re—equipping of the reception of new radars and the air control centre was enhanced. The FAP started to participate in missions by itself or in support of missions that have been carried away under the scope of the United Nations (UN), NATO, or the European Union like Baltic Air Policing, Icelandic Air Policing, Operation Active Endeavour, Operation Atalanta, Operation Sea Guardian and the FAP also participated in missions in Angola (1992) and Guinea—Bissau (1998).



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Also an important mission for the Portuguese Air Force was the air security of high visibility events happening in Portugal, aiming to protect them especially against terrorists attacks, like the UEFA Euro 2004, the Lisbon NATO summit 2010 and the visit of Pope Benedict XVI in 2010.

Base Aerea No. 5 – Monte Real

Base Aérea de Monte Real officially designated as Base Aérea No. 5 (BA5) was established in October 1959. Since its opening the base has been home of the Portuguese jet fighter aircraft like the North American F–86F Sabre, Fiat G.91, Lockheed T–33, Northrop T–38, LTV A–7 Corsair II and currently the General Dynamics F–16. On 28 June 1984, during a meeting of the NATO Commission of Infrastructures in Brussels, Monte Real was formally accepted as NATO infrastructure.

Esq201 – Falcões (Falcons) and Esq301 – Jaguares (Jaguars)

Sergeant Henrique Carvalho, Crew chief: "In August 1990 the Portuguese Air Force signed the Peace Atlantis I programme which consists of the delivery of twenty F–16 Block 15s, of which seventeen single seat F–16As and three twin seat F–16Bs, and also engines, spare parts, support equipment, logistic support, instructions for pilots and maintenance personnel and participation in the F–16 Technical Coordination Group. This was partly a payment for the use of Lajes Air Base on the Azores by the United States of America. The first four aircraft arrived in February 1994".

"In November 1998 the Portuguese Air Force signed the Peace Atlantis II programme which consists of the delivery of twenty five F-16 block 15s, of which twenty one single seat F-16As and four twin seat F-16Bs, to replace the ageing A-7 Corsair. Only twenty aircraft will be used to form an attack squadron, the other five will be used as spare sources. The first aircraft already arrived in 1999. After arrival the aircraft needed to be modified and got a Mid-Life Update (MLU) which was completed in 2003. Unfortunately we lost two aircraft by crashes and a total of seventeen F-16s have been sold to Romania, of which fourteen F-16AMs and three F-16BMs between 2019 and 2023. So at the moment we still have twenty-one F-16AMs and four F-16BMs operational. The first Romanian crew chiefs came to here and we trained them and later on we went to Romania to train more crew chiefs and also to help them with problems".

"We have the Quick Reaction Alert (QRA) task 24/7 and 365 days a year, so at every moment we are able to take—off with armed F-16s if it's needed, we have a total of four F-16s on QRA. Our F-16s are not only based here at Monte Real but we also have deployments during the year at Lajes, Azores and at Porto Santo, Madeira. At the moment four F-16s are based at Siauliai, Lithuania for Baltic Air Policing (BAP). With this deployment ten pilots and nine crew chiefs are involved. It's the fifth time that we participate in the BAP, before were in 2007, 2014, 2016 and 2018. We also participated the Islandic Air Policing mission once, in 2012. Every year the Portuguese Air Force hosts the international exercise Real Thaw at Beja

Air Base in which we participate with many F-16s and during that exercise we work closely with other Air Forces to learn from each other and to understand each other better. In 1979 we joined the NATO Tiger Association and we participated and hosted the NATO Tiger meet many times".

Phase Inspection Maintenance Team

Every 300 flight hours, the F16 aircraft has to go through a comprehensive inspection required by the manufacturer, so it can be considered airworthy and return to operational status. This Inspection is known as the Phase Inspection. Currently the Portuguese Air Force (PRTAF) implemented a 4 Cell



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process, with each Cell lasting 15 days, totalising 60 days and 420 hours to comply with. CELL 1, 2 and 3 are focused on removing, cleaning, inspecting, preliminary testing and re–installation off components from the various aircraft Systems. CELL 4 is focused on operational checkouts off all the systems required by applicable Technical Order (TO) or Job Guide (JG).

Although an actual Phase Inspection does not require so long to accomplish, this process introduced a Buffer on each Cell, that enables, when necessary, to perform some extra tasks as Time Compliance Technical Orders, malfunction trouble shooting, Aircraft Structural Integrity Programme inspections and minor structural repairs. The Phase Inspection process relies on a group off technicians, specialised on the aircrafts various systems and areas of maintenance such as Documentation, Crew Chiefs, Fuel and Hydrazine, Structural repair and corrosion control, Hydraulics and Environmental Control Systems, Electrical systems, Avionics, Non-Destructive Inspections, Egress, Engine, Loaders and Cryogenics. The assistance of Ground Support personnel and equipment is also fundamental to this process, requiring the right gear in the right place at the right time. The supply area provides the Phase inspection Kit with mandatory replacement parts and all the components found inoperative, to be replaced. Finally, a qualified test Pilot carries out the Functional Test Flight once the aircraft has completed all the required inspections, validating that all systems are operating properly, allowing therefore the F-16 to return to service.

The successful accomplishment of this mission is only possible due to the exceptional commitment, competence, thorough planning, supervision and coordination of all involved.

Base Aerea No. 1 - Sintra

Base Aérea de Sintra officially designated as Base Aérea No.1 (BA1) was established in October 1939. Since its creation is has been home to the main training and instruction of the Portuguese Air Force's pilots and technicians. Types that have been based at Sintra are de Haviland Tiger Moth, North American T-6 Texan and the Cessna T-37 Tweet. Between 1939 and the late 1940s also ground attack and bomber units equipped with Junkers Ju-52s were based at Sintra. The base later became home to the Basic Flight Training Group which consisted of two Training Squadrons. From 1966 till 2009 the base was also home to transport, liaison and maritime patrol squadrons. Between 1989 and 1993 Esq101, equipped with the Aerospatiale Epsilon TB-30, was based at Sintra and transferred to Beja. Also the Air Force museum is based at Sintra.

Esq802 – Aguias (Eagles)

Major Luis Bernardino, Squadron Commander: "I started my career in 2003 when I came here as a cadet at the academy. After my graduation in 2008 on the TB–30 Epsilon I became an Alpha Jet pilot. I flew the Alpha Jet till 2010 and then I became an instructor on the TB–30

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Epsilon. After ten years I transferred in 2020 to here and became instructor on the DHC–1 Chipmunk".

"The training of new pilots started in 1951 with a total of 66 DHC-1 Chipmunks but with the arrival of TB-30 Epsilon in 1989 a lot of the Chipmunks were sold and at the moment we only have six Chipmunks in active duty. One Chipmunk received a special colour scheme in 2021 to mark the 70 years anniversary of active flying with the Chipmunk within the Portuguese Air Force. At the moment we are the last Air Force that's flying the Chipmunk in the whole world and as a matter of fact the Chipmunk is even older than the Portuguese Air Force itself"!

"In 1989 the Chipmunks received an upgrade from

Mk.10 to Mk.20 and this upgrade gave them more powerful engines. All maintenance on the Chipmunks has been done here at Sintra. We fly around ten sorties a day. However, during the summer, we fly next to twenty sorties each day, due to the Selection Training for the future Academy's cadets. During the Academy's course, the Student Pilots fly an elementary phase which includes Contact flight (Take–off, landing, aerobatics and basic flight), Visual Navigation and 2 Ship Formation. After the academy, the student goes to the Basic Pilot Training, flying the TB–30 Epsilon, where they become graduated".

"Next to the Chipmunks, in parallel, we also fly Ask—21 gliders to teach the students the basic aerodynamics. The training includes take—off, landing, some aerobatic maneuvers and thermal flight".

Major–General Rui Freitas, Commander Academia: "I entered the academy in 1983 here at Sintra and I graduated in 1987. Then I went to Phoenix, Arizona in the United States of America for pilot training for 1,5 years. After that I became an instructor on the T–37s from 102 squadron for pilot training. Two years later I returned to the United States of America to join the Euro–NATO Joint Jet Pilot Training programme (ENJJPT) at Sheppard Air Force Base for 3,5 years. Then I went back to Sintra to open the course for the Alpha Jets of 301 Squadron at Beja. When the course was running I became Operations Officer and Squadron Commander of 101 Squadron at Beja, flying the TB–30 Epsilon. In total I have around 3,000 flying hours, mainly on the T–37 as an instructor.



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The Portuguese Air Force is working together with the Angolan Air force and for six months I was training them to learn to fly on the Cessna C–172. At the moment there are still two programs running in Angola and possibly there will be a co–operation with Brazil. After that I became Chief Operational Command in Lisbon followed by the advisor of the Air Force and then I went to the NATO Headquarters as a delegate of the Portuguese Air Force. Than I was part of the Staff of the Air Force and after that I became Commander of Base Aerea No. 1 Sintra. Soon I will receive my third star and my future within the Air Force is unknown at the moment".

"At the moment there is a registered procurement law to replace the ageing Chipmunks. Students fly but not enough, it's a pre–start for the training but we want to improve it. Every course exists around twelve students. After six months the students which are not capable for flying will leave the academy, with new aircraft this could be seen earlier and the syllabus could be changed. The Chipmunk is very limited for flying with bad weather and cross winds.

If you like the Chipmunk you like flying! The students feel it very quick, the Chipmunk is perfect for this. In the air it's a nice plane to fly but it is much harder to land than other aircraft. The Chipmunk has a three point landing so you have to switch hands to use the flaps during landing. When you are taxiing the Chipmunk you have to make left to right turns to see where you are going because you are



lying back in the plane. All those little things give us a good look for the potential of the student".

By the time this article was made Major-General Rui Freitas became Lieutenant-General and he is no longer the commander of the Academy and it's unknown to us what his function within the Portuguese Air Force is at the moment.

Article and photos by: Lowpass Aviation – Bram Marijnissen and Rene Sleegers

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