

# Macedonian Air Power



Bram Marijnissen & Rene Slegers

*At the moment of our visit this nicely camouflaged Mi-24 was the only operational Mi-24 and was photographed during a low-level flight through the Tour Canyon, which is south of Petrovec Air Base. (Bram Marijnissen)*

## History

After the second world war, Macedonia joined the Federal People's Republic of Yugoslavia as a federal unit. During the referendum on 8 September 1991, the citizens chose for the Republic of Macedonia to be an independent democratic state. Since 12 February 2019 the country is officially named North Macedonia and a long-lasting conflict with Greece, which always saw the name Macedonia as a claim on its own territory, has ended. The Air Force still uses the name Macedonian Air Force which also can be seen on the Mi-8 and Mi-17 helicopters. The country is a member of the United Nations and since December 2005 also a candidate to join the European Union.

After independence in 1991 more than 35 aircraft of the former Yugoslav Army which were based at Petrovec Air Base were distributed all over the Federal Republic of Yugoslavia. The Macedonian Air Force and Air Defence Forces was established on 10 June 1992 with one UTVA-66 and four UTVA-75 two-seat trainers which were leased from the Macedonian Aeronautical Union. In 1994 they acquired four Mi-17 Hip Helicopters from Ukraine but due to a UN arms embargo these helicopters were delivered with civil registrations. In 1996 Macedonia was excluded from the UN arms embargo and the helicopters received military serials and a nice camouflage scheme.

In 1995 four Zlin-242L trainers were acquired. In March 2001 the crisis began between Albanian terrorists and the Macedonian Government and in no time the Macedonian Air Force and Air Arms expanded with 20 aircraft. On 23 March 2001 Ukraine donated four Mi-8MT helicopters and as part of an old agreement also two Mi-24V Hind combat helicopters were delivered. Out of solidarity Greece also donated two UH-1H Hueys on that same day! Within a few months another six Mi-24 Hind helicopters were delivered from Ukraine. In June 2001 the first combat fighters arrived, three Su-25s and one Su-25UB. At the end of 2001 another two Mi-24 Hind helicopters arrived from Ukraine. In 2003 a four-seat Zlin-143L and one more two-seat Zlin-242L were acquired.

## Present

At this moment the air assets of the Macedonian Government consist of four parts: Pilot Training Centre (PTC), Air Force, Ministry of Interior and the Protection and Rescue Directorate.

The Protection and Rescue Directorate operates three civilian registered AT-802AF which are based at Skopje/Petrovec. Their only task is firefighting. During our visit they flew one mission after the other. The missions are mostly being done by retired Air Force personnel.

The Ministry of Interior operates one civilian registered Learjet 60 for VIP/Government transportation which is based at Skopje/Petrovec. Also the Policija belongs to this unit. They operate one Mi-17 and two Mi-171s out of Skopje/Petrovec. Other helicopters operated by the Policija are one AB-206, one AB-212 and one Bell-412, but these helicopters are based at nearby Idrizovo where the Police Training Center is based.

The Air Force had to withdraw the four Su-25 Frogfoots during 2004 according to the draft agreement to join NATO. During the years also six Mi-24s were withdrawn from use. Those Mi-24s and Su-25s are still in "good" shape on a dispersal next to the operational ramp and it's unknown what will happen to them. One UH-1H Huey was sent to Greece for major overhaul but the costs couldn't be paid so this helicopter is still at Stefanovikion, Greece. The other Huey is stored on a platform and won't fly ever again.

Of the six operational Hinds, five are awaiting parts for overhaul so only one Hind is really flyable at the moment. Every 50 flying hours the Mi-24s are overhauled at Skopje, but every 2,000 flying hours the Mi-24s receive a major overhaul in Ukraine. Unfortunately two of the four Mi-17s have crashed which leaves only two operational Mi-17s but luckily all four Mi-8s are fully operational, just like the civil registered four-seat Zlin-143. The nicely camouflaged An-2, including shark mouth, hasn't flown for several years but they want to make it operational again. Probably it will take a long time before it flies again, if ever.

## Pilot Training Centre (PTC)

In 2011 the Israeli company Elbit systems opened a completely new pilot training centre (PTC) at Skopje/Petrovec. The PTC uses the five two-seat Zlin-242s and acquired four Bell 206 training helicopters in 2013. The PTC is since then recruiting pilots according to Israeli philosophy. Elbit is working very closely with the MOD and every two years it's discussed if the contract will be expanded or the MOD will take over the PTC. The current contract ends at the end of 2020. The PTC is trying to recruit pilots for other countries but it's hard because North Macedonia isn't part of NATO.

One of the countries where the PTC is trying to get into business is Bosnia Herzegovina because they need 35 pilots! Countries like Austria, Cameroon and Nigeria are investigating if the PTC is suitable for them. The PTC is FAA standard so they can train civilian pilots but at this moment there is no market, maybe in the future there will be. The PTC has been introduced to NATO in Brussels so hopefully more countries are going to use the PTC.

A big advantage is that if there is a problem, Elbit solves it within a few days. If the MOD has to solve it, it would take weeks or months. Another big advantage is that due to having their own fuel tanks, there is always fuel to fly the Zlins and helicopters. The question is how this will turn out if the MOD is going to take over the PTC.

After finishing the military academy students go to the PTC and fly ten hours in the Zlin 143 just to see if they are feeling comfortable with flying. After this they will have the basic training which is 40 flying hours in the Zlin 242, except landings. If the student succeeds the basic training the next step is flying the Bell 206. The first 50 flying hours are basic training and this is followed by the advanced training of 180 flying hours, including 75 flying hours of night flying. Also tactical missions are done to see what the students are capable of. At the end of this stage the choice has to be made if a pilot will go to the Police or Air Force and which helicopter he is going to fly.

For the Air force the options are the Transport squadron, flying the Mi-8 / Mi-17, or the Attack Squadron, flying the Mi-24. For the Police various types are possible. Before flying the real helicopters, several hours have to be spent in simulators to see if the right choice has been made. The

screening is very strict but when they pass they'll be ready for it. It's very hard to train a good pilot, out of every 1,000,000 people only 1 is capable of being a military pilot! Before the PTC acquired the four Bell 206 training helicopters, pilots went directly from the Zlin to the Mi-8/Mi-17.

The PTC also has two advanced full-motion tactical simulators, one for the Mi-8/Mi-17 and the other one for the Mi-24. The simulators are equipped with advanced avionics providing an optimal training environment. At the moment of our visit pilots from Poland and Cameroon were using the simulators and they were very satisfied with them. Later this year Bulgarian pilots will follow. Also PTC is trying to expand the use of the simulators to countries like Croatia and Serbia.

## Future

The Pilot Training Center is a well organised organization, hoping for many more customers in the future so there is more money to invest in the PTC and the Air Force. Their Zlins and Bells are well maintained and flyable for many more years. The transport helicopters of the Air Force are still in good shape and flyable condition but they are getting older which is the same for the Mi-24 Hind helicopters, except these are having problems with getting spare parts and only one is operational at the moment. They are looking for new helicopters but changing from eastern build to western build helicopters is not easy and will cost a lot of money. It is not mandatory but highly recommended! So the future of the Macedonian Air Force is unclear.

## Exercises

The Macedonian Air Force have taken part with helicopters in exercise Adriatic Strike which has been held for several years in Slovenia. Last year they attended with a Mi-8 helicopter. A Mi-24 should have gone to Slovenia also, but it had a problem and cancelled its participation. Last year they were also observers during Anatolian Eagle. They want to participate in this exercise with helicopters but the main problem is the airworthiness of the helicopters and of course money. By joining NATO they're hoping it's easier to get spare parts for the helicopters and to make them all operational again so they can participate in more international helicopter exercises.

We would like to thank everybody within the Macedonian Ministry of Defence, Macedonian Air Force and the Pilot



Since 2013 the Pilot Training Centre (PTC) has been operating four of these Bell 206B-3s for training pilots to operate the Mi-8, Mi-17 or Mi-24. (Rene Slegers)





The Transport Helicopter Squadron operates four Mi-8s and two Mi-17s and all of them have this very effective camouflage. Unfortunately two Mi-17s have been lost by crashes. (Rene Slegers)

Training Centre (PTC) who made this fantastic visit and air-to-air flight possible.

#### Serial overview

##### Operational ramp:

302, 303	Mi-17	Transport Helicopter Squadron
305, 306	Mi-8MT	Transport Helicopter Squadron
308	Mi-8MTV-2	Transport Helicopter Squadron
210	Mi-24V	Combat Helicopter Squadron

##### Maintenance Hangar:

307	Mi-8MT	Transport Helicopter Squadron
201, 205	Mi-24V	Combat Helicopter Squadron
Z3-DCS	Zlin 143	Training Flight

##### Stored outside:

150	An-2	Training Flight
321	UH-1H	wfu
202, 207, 209	Mi-24V	Combat Helicopter Squadron

##### Stored in dispersal:

120	Su-25UB	wfu
121, 122, 123	Su-25	wfu
203, 204	Mi-24V	wfu
206, 208	Mi-24V	wfu
211, 212	Mi-24K	wfu

##### PTC

401, 402	Bell 206B-3	Pilot Training Center
403, 404	Bell 206B-3	Pilot Training Center
102, 103	Zlin 242L	Pilot Training Center
104, 105, 106	Zlin 242L	Pilot Training Center

##### Flying:

MAP-7711	Mi-171E	Police Aviation Unit
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##### Civilian side

Z3-BGT	AT-802AF	Protection and Rescue Directorate
Z3-BGU	AT-802AF	Protection and Rescue Directorate
Z3-BGV	AT-802AF	Protection and Rescue Directorate



After major maintenance by Zlin in Czechia the old blue and white colours will be replaced by the colours of the Macedonian Flag. During our visit two had the old and three had the new colour scheme. (Bram Marijnissen)





*It is sad to see this nice An-2 in this state. Luckily it should become operational again. (Rene Sleepers)*



*A nice line with five out of six beautifully camouflaged Mi-8s and Mi-17s. (Rene Sleepers)*



*These Mi-24s are waiting for better times. (Rene Sleepers)*