

Bangladesh's potent and professional air force is increasingly active internationally through participation in UN missions, as Rogier Westerhuis and Ian Carroll discover.

FREEDOM OF THE SKIES



THE YOUNGEST country in the Indian subcontinent, Bangladesh is often portrayed as being politically turbulent in the face of economic, social and geographic challenges. But its proud people are eager to improve standards, and the same can be said for the Bangladesh Air Force (BAF), which began life 45 years ago with just a handful of aircraft.

Headed by Air Chief Marshal Abu Esrar since June 12, 2015, the BAF has more than 14,000 personnel. It's organised into 24 directorates under three branches – Operation and Training, Maintenance and Administration – and uses five main air bases, a heliport at Paharkanchanpur and a

single radar base. Although it had earlier been used as a forward operating base for deployments, in 2011 Cox's Bazar was designated as the fifth main operating air base. Currently it has no flying units and it will be a while before all facilities are in place to host aircraft on a permanent basis. By late 2016, runway extensions were in progress and major construction works under way on the base buildings.

Almost all the air force's fighters are stationed at BAF Base Bangabandhu/Kurmitola (having moved here in the 1980s from nearby Bashar/Tejgaon), which shares its runway with Dhaka's Hazrat Shahjalal International Airport.

FAST JET UNITS

5 Squadron 'Defenders'

As Bangladesh's first fighter unit, 5 Squadron used to be called the 'First Supersonics'. Now known as the 'Defenders', it formed as 507 Squadron on January 31, 1972, soon after the country gained independence.

The squadron initially flew a single T-33, followed just five weeks later by the first of a pair of F-86E Sabres. These three ex-Pakistan Air Force jets flew for only a few months before being withdrawn in September 1972.

It would be another 11 months before the

squadron took delivery of a new type – six MiG-21MFs and a pair of two-seat MiG-21UMs, their first flight being logged on August 2, 1973.

For fighter conversion the squadron also adopted Shenyang FT-5s, first flying the type on December 5, 1979. The FT-5s remained in service until 1986 and the BAF's last three surviving *Fishbeds* had been withdrawn by 1989 – when the first of 16 Chengdu F-7MBs and nine two-seat FT-7MBs arrived to replace the ▶



35 Squadron F-7BGI serial 721 and two-seat FT-7BGI 2703. The BAF maintains a constant air defence alert facility rotated between different squadrons. All photos Dr Andreas Zeitler, unless otherwise stated

FORCE REPORT Bangladesh Air Force



BANGLADESH AIR FORCE – SQUADRON EMBLEMS



Above: 35 Squadron 'Thundercats' F-7BGI 2722 is representative of the latest batch of F-7s delivered to Bangladesh.

BANGLADESH AIR FORCE – AIR ORDER OF BATTLE

Squadron	Company	Location
1 Squadron	AW139, Mi-17-1V/Mi-171/Mi-8AMT/Mi-171Sh	BAF Base Zahurul Haque, Chittagong
3 Squadron	An-32A/B	BAF Base Zahurul Haque, Chittagong
5 Squadron	F-7BG/FT-7BG	BAF Base Bangabandhu Kurmitola, Dhaka
8 Squadron	MiG-29B/MiG-29UB	BAF Base Bangabandhu Kurmitola, Dhaka
9 Squadron	Bell 212	BAF Base Bashar Tejgaon, Dhaka
11 Squadron	PT-6	BAF Base Matiur Rahman, Jessore
15 Squadron	K-8W, L-39ZA	BAF Base Matiur Rahman, Jessore
18 Squadron	Bell 206L	BAF Base Matiur Rahman, Jessore
21 Squadron	Yak-130	BAF Base Zahurul Haque, Chittagong
25 Squadron	F-7MB/FT-7MB	BAF Base Zahurul Haque, Chittagong
31 Squadron	Mi-17/Mi-171	BAF Base Bashar Tejgaon, Dhaka
35 Squadron	F-7BGI/FT-7BGI	BAF Base Bangabandhu Kurmitola, Dhaka
101 Special Flying Unit	Mi-171/Mi-17/Mi-17-1V/C-130B/L-410	BAF Base Bashar Tejgaon, Dhaka
Flying Instructor School	PT-6	BAF Bogra

MiG-21s. They were divided between 5 and 35 Squadrons.

The BAF bought another 16 F-7s in 2005 – 12 of the more advanced F-7BGs and four two-seat FT-7BGs. The first batch, flown by Bangladeshi pilots, arrived at Kurmitola on March 29, 2006 followed by the second, final batch in September. Assigned to 5 Squadron, their primary task is air-to-air although they're also used in the air-to-ground role.

8 Squadron 'Vigilance, Valour, Victory'

Bangladesh's most advanced fighter is the MiG-29. Eight, including a pair of two-seaters, were delivered in 2000 and assigned to 8 Squadron, which flew its first mission on March 1 that year.

The unit re-formed on December 28, 1976 and flew the Shenyang F-6 (until 1996) and FT-6 (until 2000), both





Left: As the BAF's premier air defence fighter, 8 Squadron's 'Fulcrum' is a prized mount. The BAF is reportedly in the market for another eight new multi-role fighters, plus four options. Rogier Westerhuis via BAF

Below: The first Bangladeshi Yak-130 took to the air at Irkutsk on April 29, 2015. 21 Squadron's Yak-130s replaced the A-5IIIs and FT-6s with the unit, 16 examples being delivered between September 2015 and last year.

Bottom: One of four two-seaters acquired in 2005, 5 Squadron's FT-7BG F944 arrived together with 16 single-seat F-7BGs. The BG model includes NATO-standard hardpoints that can carry Western-style weaponry, two cannon, radar and a partially 'glass' cockpit equipped with an electronic flight information system (EFIS).



types having been donated by Pakistan. The first batch of MiG-29 pilots trained in Russia, while MiG company test pilots also provided instruction in Bangladesh. BAF pilots have meanwhile used the Royal Malaysian Air Force's MiG-29 simulator for combat training: the jet's N019 fire-control radar provides a beyond-visual-range capability, which the F-7BG lacks.

Overhauled in Ukraine, the BAF fleet is expected to be in service for at least another ten years.

21 Squadron 'The Avengers'

The only unit specialising purely in the air-to-ground role is 21 Squadron which, established on July 15, 1986, flew 16 Nanchang A-5III ground-attack aircraft delivered from 1991.

Originally set up in Chittagong, the squadron moved to Kurmitola in 1991, before the country's infamous cyclone, remaining there until returning

to Chittagong in 2000. With the withdrawal of the F-6, the remaining FT-6s were allocated to 21 Squadron and used for training A-5 pilots. With no two-seat version of the A-5III, new pilots had to take their first flight in a *Fantan* solo.

Some of the squadron's A-5IIIs and FT-6s were overhauled in China, while others underwent a life extension programme, before all were replaced by the Yak-130 in 2015: deliveries of the 16 ordered began in September that year and were completed in 2016.

25 Squadron 'Trendsetters'

After its inception on November 27, 1989, 25 Squadron operated the F-6/FT-6. In October 1995 the BAF received eight L-39ZA Albatros jet trainers and assigned them to the squadron as the operational conversion unit. One crashed in April 2012, killing one of its two pilots.

The aircraft transferred to 15 Squadron in 2013, and in their place the unit received F-7MB/FT-7MB jets formerly with 35 Squadron, using them for advanced jet conversion training.

35 Squadron 'Thundercats'

In 1989 the first of 16 Chengdu F-7MBs and nine two-seat FT-7MBs arrived to replace the MiG-21, and were assigned to 35 Squadron 'Thundercats' – which had formed on January 11, 1990. The MiG-21's retirement left 5 Squadron without aircraft, so 35 Squadron shared its Chinese jets with the unit until 2006.

The primary roles of 35 Squadron are offensive air support, close air support and air interdiction, for which the aircraft can use its cannon and carry a variety of air-to-ground weaponry. Secondary tasks are training and air defence; infrared-guided missiles are carried for the latter.

The squadron frequently uses the BAF gunnery range to practise its air-to-ground role and once a year is involved in live-firing exercises over the sea, the F-7MB towing a target banner. In common with all other BAF squadrons, the unit often works with the army and navy.

In November 2011 the then Chief of Air Staff, Air Marshal Ziaur Rahman, announced the BAF had ordered another 16 F-7s, comprising 12 single-seaters and four dual-seaters. The new jets were the latest version of the F-7, designated F-7BGI/FT-7BGI. Some of their equipment is specific to Bangladesh and they have an improved cockpit layout and a modern GPS.

The F-7BGI/FT-7BGIs were delivered to 35 Squadron between 2012 and 2013, their introduction enabling the F-7MB/FT-7MBs to move to Chittagong to join 25 Squadron, which assumed the advanced jet conversion role. ▶





TRANSPORT AND COMBAT SUPPORT UNITS

Chittagong composite base

BAF Base Zahurul Haque in Chittagong is a composite station, home to helicopter, fighter, transport and training squadrons. Strategically located, it affords good access to the Chittagong Hill Tracts (CHT) as well as the Bay of Bengal.

The Bay is rich in natural resources, ownership of some of which is disputed with Myanmar (formerly Burma). Meanwhile, the CHT is an area that, until a peace treaty in 2007, saw 20 years of insurgency and violence between government forces and tribal rebels fighting for greater autonomy.

On April 29, 1991 BAF Base Zahurul Haque was severely hit by one of the country's worst cyclones, which killed around 140,000 and left around 10 million people homeless. A 15ft (4.6m) surge of seawater swept through the airfield, destroying around 40 aircraft and helicopters and leaving the BAF short of equipment to assist those affected.

On May 10, the US launched Operation Sea Angel, one of





the biggest military disaster-relief operations ever staged. Since 1991 the BAF has implemented a comprehensive evacuation plan for the rapid movement of all airworthy aircraft and helicopters.

For example, during the 2011 cyclone season all airworthy aircraft and helicopters were twice evacuated to Dhaka. Around the base, ramps of up to 20ft (6m) height have been constructed to accommodate unairworthy aircraft.

1 Helicopter Squadron 'Pioneers'

No 1 Helicopter Squadron, one of two BAF units flying the Mi-17 and its sub-variants, formed as 'Kilo' Flight on September 28, 1971, at that time still in Dimapur, in India, where the nascent BAF was set up with Indian assistance. It later became 501 Squadron and in 1973 assumed its current designation. Beginning life with the Alouette III, the unit received the Mi-8 in 1973, the type remaining in service until the mid-1990s.

In 1995 the BAF took on the first of 35 Mi-17s of different variants, and from 1998 the squadron operated Bell 212s: one flew in the search and rescue (SAR) role, painted in a high-visibility scheme and equipped with hoist and long-range radio.

The main task for 1 Squadron is tactical ground support, and it provides logistical support to the army and other government organisations, working mostly from isolated locations in the CHT. The squadron is also used for reconnaissance work and plays a major role in relief and disaster management.

In July 2014, AgustaWestland announced a contract with the Bangladesh defence ministry



Above: 1 Helicopter Squadron 'Pioneers' began life as the very first BAF flying unit. Its latest equipment comprises two AW139s, including 613 (c/n 31613). **Top:** Receipt of the 16 F-7BGI/FT-7BGI versions, between 2012 and 2013, allowed the earlier F-7MB/FT-7MBs to adopt the advanced jet conversion role. Serial 2702 is one of 35 Squadron's two-seat FT-7BGIs. **Below:** The older F-7s – this is F-7BG 942 in the markings of 5 Squadron 'Defenders' – are still considered an effective aircraft for point defence, thanks to their light weight and rapid acceleration.



UN operations

It's not widely known that Bangladesh has long been a main contributor to United Nations peacekeeping missions, a role in which all four services (air force, army, navy and police) take part with personnel as well as equipment.

The Bangladesh Army first deployed in 1988, followed by the BAF in September 1995 when one Bell 212 with 17 BAF personnel were sent to Kuwait for the UN Iraq-Kuwait Observation Mission (UNIKOM).

The BAF's contribution to the mission lasted for almost eight years, ending only a few days after the outbreak of the Iraq War in March 2003. In its time in Kuwait the contingent expanded to 40 personnel and flew approximately 16,000 hours.

Beginning in October 2003 the air force took part in the UN Mission of Support in East Timor (UNMISET), with two Bell 212s, and in July 2003 deployed an Aviation Unit and an Airfield Support Unit to Bunia in the northeast of the Democratic Republic of Congo (DRC) for the UN Organization Mission in the Democratic Republic of the Congo (MONUC).

In June 2010 it sent a C-130B Hercules to the DRC where the BAF contingent also has five Mi-17s.

Three Bell 212s deployed to Chad in October 2010 as part of the UN Mission in Central African Republic and Chad (MINURCAT) before being redeployed to Ivory Coast nine months later, from where they operated until May 2015 under the UN Mission in Côte d'Ivoire (UNOCI).

The BAF began its UN mission in Mali on June 11, 2013 and subsequently sent three Mi-171Sh helicopters to support the UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) locally. More recently, in support of the UN Stabilization Mission in Haiti (MINUSTAH) in Haiti, it provided a Bangladesh Utility Aviation Unit contingent – comprising 110 personnel and three Mi-171Sh helicopters – in September 2015.



for two AW139 helicopters to be operated by the BAF for maritime SAR and other utility missions. The two aircraft were delivered before the end of 2015 and serve with 1 Squadron.

3 Squadron 'Unicorns'

No 503 Squadron, which later became 3 Squadron, formed on December 30, 1971, equipped with the DHC-3 Otter. From 1973 it flew the An-24 and An-26.

The An-24 was withdrawn in 1977 and the An-26 soldiered on until 1989 when it was replaced by the An-32. The smallest BAF flying squadron, 3 Squadron originally operated two An-32s, followed in 1995 by a third.

Currently all three – two An-32As and an An-32B – are in use for transport duties including casualty evacuation (casevac) and medical evacuation (medevac). They also conduct maritime surveillance and patrol roles and, fitted with four hardpoints, can carry bombs.

The squadron assists in relief and disaster operations and was heavily involved in supporting the local population after major cyclones such as Cyclone *Sidr* in 2007 and *Aila* in 2009.

To get relief items to those who need them, the unit has developed small parachutes that can carry up to around 13lb (6kg), enough to support a family for several days.

9 Squadron 'Scorpions'

Equipped with the Bell 212, 9 Squadron formed as 17 Squadron



Above: Four different versions of the Mi-17 are operated, including the Mi-171, which can carry weapons. An initial batch of three examples is believed to have been delivered by May 2006, followed by a further three in 2012.

Below: A long-term Antonov operator, 3 Squadron 'Unicorns' is the exclusive preserve of the 'Cline', including An-32A 1701 'S3-ACA' (c/n 1701), one of three An-32s in service.





Left: An initial pair of Mi-171Sh helicopters is believed to have been delivered in January 2012. In April 2014 Rosoboronexport announced an order for five more examples with deliveries believed to have begun during April the following year. An attrition loss occurred on May 13, 2015.
Below: Four 1960- and 1961-built ex-US Air Force C-130Bs were delivered in January 2002. One example was stored before being repaired and overhauled by AIROD at its facility in Subang, Malaysia in spring 2013 and returned to service.



in November 1975 and assumed its current identity in 1982. It flew the Alouette III until the arrival of the first of ten Bell 212s in 1977, and later received three more in VIP/VVIP configuration and one equipped for SAR.

The squadron supports the army, navy and police, using the Bell 212 for transport, tactical reconnaissance and support of special forces, and the helicopters can carry side-mounted machine guns for the counter-insurgency role.

Also involved in disaster management and relief operations, 9 Squadron plays a role supporting communities during floods or in other emergencies and supports United Nations missions overseas.

31 Squadron 'Beyond the Call of Duty'

Created in January 1981, 31 Squadron operated the Bell 212 until the arrival of 12 Mi-8s helicopters in 1983 (which it shared with 1 Squadron), the last being withdrawn in 1995.

By that time, the squadron had taken delivery of three Mi-17s, which entered service in 1991, and more have arrived since. Currently Mi-17s are operated in four different versions; the latest delivery comprised five Mi-171Sh helicopters in December 2015.

The Mi-17 is mainly used for tactical ground support, transport, reconnaissance, casevac and medevac. All Mi-171s can carry weapons but the Mi-171Sh is a dedicated combat-transport helicopter

with more firepower, ideal for combat assault missions and combat search and rescue (CSAR). It can carry a nose gun, three machine guns in its doors and a range of rockets and bombs.

101 Special Flying Unit 'Excellence and Beyond'

The only composite BAF unit is the 101 Special Flying Unit, based at Bashar with a mix of Mi-17s, four C-130B Hercules and three L-410s. It consists of two flying wings: a Helicopter Wing and a Transport Wing.

Established in April 2001, 101 SFU's primary missions are to transport VIPs and VVIPs and carry out special operations. It was originally equipped with Mi-17 and Bell

212 helicopters and an An-32 twin-engined transport.

Of the Mi-171s currently with the unit, two are Ulan-Ude-built Mi-17-1Vs in VIP configuration, painted in a special blue/white livery. Delivered in March 2006, their sole task is (V) VIP flights. The other Mi-171s and the C-130Bs fulfil a dual role, and when used for the transportation of (V)VIPs are configured accordingly.

These old C-130Bs came from surplus USAF stocks, and although their wings have been modified to have the same structure as 'H' models, their engines are original. In addition to transport tasks, they are used for UN operations in Africa and play a key role in disaster management, locally and abroad.

International support missions have included flights to Pakistan after the October 2005 earthquake, flying a medical team and supplies to Burma (Myanmar) after Cyclone *Nargis* in May 2008, and transporting two Bell 212s to assist Sri Lanka and the Maldives shortly after a tsunami.

The unit's three L-410UVP-E20 aircraft, delivered in 2015, are used for multi-engine conversion for the transport crews.

Flight cadet training

Aircrew training for the BAF began on December 4, 1974 with the creation of the Cadets Training Unit in Bashar. In 1977 it moved to Jessore as the Cadet Training Wing before becoming, in 1982, the Bangladesh Air Force Academy. ▶



Above: Of 16 examples of the Bell 212 delivered to the BAF from 1980, BH971 (c/n 30971) is one of perhaps six that remain in use with 9 Squadron. The aircraft have been widely deployed on UN and humanitarian duties, including to the Maldives after the 2004 Indian Ocean tsunami.



Above: 101 Special Flying Unit's three L-410UVP-E20 aircraft are used to convert transport crews to multi-engine types. The first aircraft was delivered in April 2015; the second and third examples followed in May and June of the same year.

Potential cadets undergo military and academic training concurrently and later begin flying training. They take three-year degree courses with a graduation curriculum set up by the National University.

Flying training is delivered by the Flying Training Wing, which comprises three squadrons flying the Nanchang PT-6, the K-8W, L-39ZA; and, for helicopter conversion, the Bell 206L. The BAF's first female pilots began training in the autumn of 2014.

11 Squadron

Basic flight training and teaching cadets the principles of aeronautics are the tasks of 11 Squadron, which formed in 1982

to fly the PT-6. A first batch of four, delivered in 1977, has since been supplemented by more than 50 additional aircraft. Some of them have been modified with ADF and a Garmin GPS system.

In December 2014, Bangladesh's prime minister announced the procurement of 12 new PT-6s. Sightings of two previously unknown examples (2701 and 2702) last December suggest they have been delivered, but are likely to be refurbished, second-hand trainers.

Basic flying training, which in Bangladesh includes night flying, takes around 120 hours, after which students are selected to fly fighters, helicopters or transport aircraft. Every year, 11 Squadron

has two classes with around 10 to 15 cadets in each. It also accepts student pilots from Bangladesh's navy and army. Pilots from Sri Lanka, Malaysia and Iraq have also trained with the BAF.

The Flying Instructor School at Bogra uses the PT-6 too, and receives administrative and operational support from Jessore. Its course includes an academic syllabus as well as a flying curriculum of around 72 hours.

15 Squadron

Pilots selected for fighter or transport streams go on to train with 15 Squadron – which, established on October 25, 1977, flew the Magister for 20 years before converting to 12

ex-USAF T-37Bs transferred from 25 Squadron in Chittagong, which had been delivered to the BAF in 1996.

The jet conversion course took 35 to 40 hours and included formation flying. The T-37Bs retired in December 2011: their ejection seat cartridges had passed their expiry date and when two out of three of them failed during tests, it was decided to ground the jets.

An interim replacement involved reallocating 25 Squadron's L-39ZAs to 15 Squadron in 2013 when the F-7MBs moved from Kurmitola to Chittagong. Nine



Above: Two new PT-6s – 2701 and 2702 – were first seen in last December. These are likely to be part of a batch of 12 new PT-6s announced in December 2014.

Right: The K-8W serves alongside the ageing Albatros with 15 Squadron. Nine Karakorums were delivered in September 2014.



new K-8W Karakorums were delivered during September 2014 as a permanent solution, though the L-39ZAs were still active last December.

The L-39 can carry a cannon and rocket pods, bombs and air-to-air missiles. In its previous service with 25 Squadron, the type trained new flying officers selected for the fighter stream who had successfully completed the jet conversion course with 15 Squadron.

Advanced jet conversion then prepared them to join any of the operational fast jet squadrons.

The 110-hour conversion took the new pilot from basic handling stages through to night flying, air combat manoeuvring, air-to-ground and formation flying.

The BAF gains valuable knowledge from having operational conversion unit (OCU) students and instructors attending similar courses countries such as the US, China and Saudi Arabia.

18 Squadron

Rotary-wing conversion is overseen by 18 Squadron, which has operated four Bell 206L Long Rangers since being formed on April 1, 1982. Conversion involves between 50 and 70 flying hours plus four weeks' ground school and the squadron supports army, navy and foreign pilot training.

After the conversion the pilot officer will be assigned to one of the operational helicopter squadrons where he or she converts onto the Bell 212 or Mi-17.

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Above: While this L-39ZA continues to wear the markings of Chittagong-based 25 Squadron, satellite imagery confirms the transfer of these aircraft to 15 Squadron at Jessore in 2013.

Below: Of 42 examples of the PT-6 originally in service at least four have been written off.



Greek multi-m

Home to six Hellenic Air Force units, Elefsis hosts no fewer than nine aircraft types with roles encompassing cargo transport, VIP transport, airborne early warning, combat search and rescue and firefighting, as **Mark Rourke** reports.



EVERYTHING IS achieved through diligence", is the proud wording on the emblem of the Hellenic Air Force's (HAF) 112 Pteriga Makhis (PM, 112th Combat Wing).

Greek dramatist Menander's (342-292 BC) quotation befits the mission statement of the unit under the Diikissi Aeroporkion Matafora (Air Transport Command), located at Elefsis air base.

The air base, 15km (9.3 miles) west of Athens, has the largest number of personnel in the HAF and contains its most diverse fleet.

Commander of 112 PM, Brigadier General Tzallas, explains the mission statement of the wing as sustaining "a high level of effectiveness and readiness – through the appropriate structures, personnel training, maintenance of the available assets and available equipment – to assume and conduct all assigned tasks successfully, including execution of all air operations and handling of emergency situations".

Training is, of course, a priority when it comes to undertaking its diverse roles, as the wing's Force Protection Director, Colonel Peros explains:

"Training of personnel takes place at Elefsis. Our wing has a high degree of autonomy regarding the training of the flight crews, engineers, ground personnel and almost everyone that serves in the base, with initial and follow-up programmes.

"The initial training for flight crew members – once they've left Kalamáta [the HAF's primary aircrew training station] and arrived here and been assigned an aircraft type – is conducted at the Operational Conversion Unit [OCU] on the squadron that operates that type of aircraft and speciality."

The OCUs use aircraft specific to squadrons, and pilots or crew usually become qualified within four to six years.

VIP specialists

For the local population, perhaps the most familiar aircraft types at Elefsis are those operated by Mira Metaforas Ypsilon Prospan 352 (MMYP, VIP Transport Squadron) 'Cosmos', which transports Greek Government officials and heads of state. Its aircraft are also used for repatriation missions involving Greek citizens overseas as well as medical emergencies.

Deputy commander of 352 Mira, Lt Col Ioannis Giannakakis, has enjoyed an impressive career in the HAF. After flying more than 2,000 hours on the F-4E Phantom II with 337 Mira, he had tours with NATO's Allied Joint Force Command Naples and the Combined Operations Centre at Larissa in northern Greece.

His role in Naples was particularly rewarding, as he was Air Officer Commanding (AOC) for Operation Unified

ission legends



Protector,
responsible
for controlling
aviation
elements
over Libya.

He then became an aide de campe to the Greek President, providing advice on military matters involving the HAF.

Three aircraft of two types are operated by 352 Mira – a Gulfstream V delivered in March 2003 supported by two Embraer 135s – one of which is an ERJ-135LR for long-range missions. The ERJs first arrived from Brazil in January 2000.

The colonel told *AFM* what it's like to fly the Embraer after a career in fighter jets: "I think it's right on time for me. When I was young, with my blood running faster in my veins, the F-4 was the best choice... Fully manual, difficult to handle, dangerous. A real fighter! Now, getting closer to my 50s, safety and



Top: The jewel in the crown of the HAF 'force multipliers' is the EMB-145H fleet operated by Elefsis-based 380 MASEPE. Serial 374 (c/n 145374, formerly PP-XHL), is one of four examples that entered service from 2009. **Above:** The flight deck of one of 352 Mira's two VIP-configured Embraer 135s. All photos Mark Rourke

comfort is my aim. Fully automatic, safe and reliable, the ERJ is the choice. Travelling all over the world is an additional benefit!"

Spartans and firefighters

Also based at Elefsis is 354 Mira Taktikon Metaforon (MTM, Tactical Transport Squadron) 'Pegasus' which has eight C-27J Spartans on strength. Twelve of the turboprop transports were originally ordered in January 2003 but four were cancelled and delivered to Mexico.

Delivered from August 2005, the C-27Js are among the HAF aircraft most commonly seen outside Greece, by virtue of their tactical airlift role.

The C-27J is heavily utilised not only for local missions but also within the wider framework of NATO, the European Union and the United Nations. But the Spartan's



secondary missions – medical evacuation and maritime patrol – have recently assumed greater importance, especially with the influx of refugees from the Syrian conflict arriving in Greek-controlled coastal areas.

Another resident squadron at Elefsis, 355 MTM 'Ifestos' (Hephaestus – the Greek god of fire), is equipped with the survivors of 20 Canadair CL-215s to have served with the HAF. The firefighting amphibian has been in use for 40 years, the first of four arriving in December 1975.

Two more arrived in 1977, and by 1990 the inventory comprised 16 examples. Four more were added in 1997 when Greece purchased second-hand CL-215s that previously served with the Yugoslavian Air Force.

During the firefighting season, typically spring and summer, the unit's aircraft

Above: Immaculate Gulfstream V serial 678 in the hangar at Elefsis. Top: Without doubt the most charismatic aircraft on the Elefsis flight line is the piston-engined CL-215 amphibian, which can also be found at work fighting fires in France, Turkey and Israel. Serial 1073 (c/n 1073, formerly C-GKDT), was delivered to the HAF in the early 1990s. Below: An early victim of Greek financial woes was the Spartan fleet, slashed from a planned 12 to the current eight aircraft. These versatile turboprops are frequently employed in support of NATO, EU and UN missions and have recently added maritime patrol to their repertoire.



Greece bought 12 C-130Hs from 1975 and five C-130Bs in 1992, including serial 300 (c/n 3604). Four of these B-models remain in active service, having undergone a modest upgrade.



are deployed to strategic locations, with detachments based at Andravida (three aircraft), Nea Anchialos (two) and Samos (two) while the rest of the fleet is at readiness or in maintenance at Elefsis.

Highlighting the dangerous work involved, at 1109hrs on June 26 last year, CL-215 serial 1111 was damaged beyond repair when its number one engine caught fire during a mission near Dervenochoria in the northwest Attica region. After making an emergency landing the crew escaped before fire consumed the aircraft.

Co-pilot Lieutenant George Badikos explains the attraction of flying the CL-215 on such missions: "After 350 hours of flight training at Tatoi [Cessna T-41D] and Kalamáta [T-6A Texan II and T-2 Buckeye] I chose to begin a career in firefighting at Elefsis with the old but trusted CL-215s.

"I knew and understood the age of the aircraft may be a drawback but its role and contribution in the HAF and the Greek state is enormous.

"Greece's position in the southeast of Europe means high temperatures for more than half the year, so fires are very common – and costly in money and human lives. That gives us the push we need to keep on going to complete the difficult and dangerous task of firefighting."

With no big lakes available in Greece for water pick-ups, the CL-215 pilots have to take the aircraft to the open sea. "We then arrive at the fire, which more often than not is in uneven terrain, and we drop to below 100ft to save anything from forests to trees and houses, as well as the firefighters

on the ground that are in lethal danger.

"After almost seven years and 800 hours, I've flown over the entire Greek terrain, picked up water from the sea and operated on almost 300 firefighting missions – and I'm a year away from becoming a first pilot. Even though I've not flown a *jet* fighter, our last piston-engine firefighter fills me with confidence and I'm proud of doing this 'extreme sport'!

"The experience of these extreme flights, the very low water drops and the feeling of picking up water from the Aegean can't be compared to a thousand hours on fighter jets. So we keep on hoping for safe water landings and fewer fires!"

Greece has also deployed the CL-215 – as well as the more modern CL-415s that equip 383 Mira at Thessalonki-Makedonia – to other countries for fire suppression ▶



duties, including France, Turkey and Israel.

In Greece itself, August 2007 saw the worst forest fires in recent history, with 355 MTM in the thick of the action in the Peloponnese. Crews with experience from that period provide valuable input to the training of new aircrew recruits, two to four of which join the squadron each year.

Transport workhorse

The backbone of the HAF transport fleet comprises a mix of C-130B and C-130H Hercules belonging to 356 MTM 'Iraklis' (Hercules).

Officially at least, 15 Hercules remain in service. The ten survivors of the C-130H fleet (two were written off in February 1991 and December 1997) began an Avionics Upgrade Program (AUP) in conjunction with L-3 Communications' SPAR Aerospace subsidiary and Hellenic Aerospace Industry (HAI) in 2005.

The upgrade also covered the C-130B fleet, five of which were recovered from US Air Force stocks in 1992. Of the B-models, serial 296 has been withdrawn from service and

now serves as an instructional airframe.

Completed in 2010, the upgrade included modifications to the GPS/inertial navigation system, autopilot, weather radar and digital engine control system. Meanwhile the electronic warfare system was improved, incorporating a new missile proximity warning system and self-protection suite; the electronics upgraded; and a partial glass cockpit added.

A Traffic Collision Avoidance System (TCAS) completed the AUP along with an Electronic Flight Information System (EFIS) and a Flight Management System (FMS). Of the 15 C-130s to undergo the



'Recent deployments include flood relief in Pakistan in 2010 and support missions after the Indian Ocean tsunami in 2004, the school siege in Beslan in 2004 and the Turkish earthquake in 1999.'

AUP, all but three were completed by HAI at Tanagra, north of Athens.

As with most countries committed to UN and NATO operations, the HAF transport fleet, and the C-130s in particular, sees much use for humanitarian operations. Recent deployments include flood relief in Pakistan in 2010 and support missions after the Indian Ocean tsunami in 2004, the school siege in Beslan in 2004 and the Turkish earthquake in 1999. Greek obligations to NATO require three aircraft to be ready for missions involving the nation's rapid-reaction forces (Force Delta) while another is available to respond to the NATO Response Force (NRF) within five days' notice. Two of the 356 MTM's C-130H

Hercules (serials 741 and 747) are meanwhile configured as electronic warfare aircraft.

Search and rescue

Responsible primarily for SAR missions, 358 Mira Erevnas Diasosis (MED, Search and Rescue [SAR] Squadron) 'Faethon' (Phaethon) includes a VIP flight equipped with Bell 212s. These three smart-looking blue and white helicopters undertake local flights in support of 352 Mira.

Though headquartered at Elefsis, the squadron is deployed to six other bases: Larissa, Limnos, Tanagra, Souda, Araxos and Nea Anchialos.

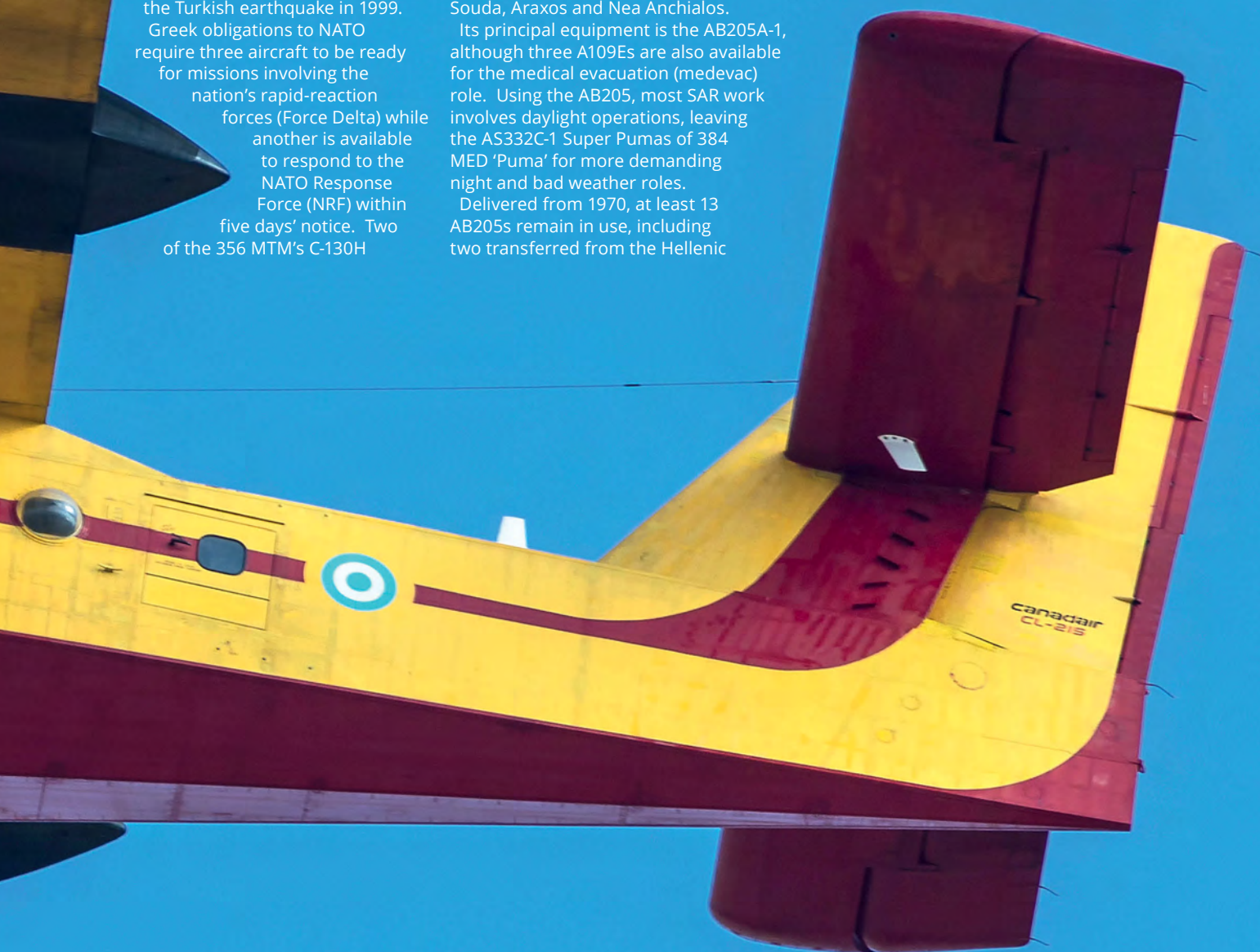
Its principal equipment is the AB205A-1, although three A109Es are also available for the medical evacuation (medevac) role. Using the AB205, most SAR work involves daylight operations, leaving the AS332C-1 Super Pumas of 384 MED 'Puma' for more demanding night and bad weather roles.

Delivered from 1970, at least 13 AB205s remain in use, including two transferred from the Hellenic

Army. One of them made the news on November 10 last year when the HAF transported a 33-year-old patient of Chinese descent from the freighter *Hoegh Shanghai* 45nm (83km) off Kalamáta.

The Super Pumas of 384 MED are used for more difficult SAR tasks such as combat search and rescue (CSAR), special operations and medevac flights day and night and in all weather conditions.

The unit has 12 AS332C-1s on strength, four of which are assigned to Hellenic Coastguard duties. The helicopters ►



Above: Despite the arrival of the turboprop CL-415, the ageing CL-215 remains at the forefront of HAF firefighting operations.

Left: Minus rotors, engine and transmission, AS332C-1 Super Puma serial 2780 undergoes heavy maintenance at Elefsis.



are routinely detached to operational areas and are normally only at Elefsis for maintenance or training.

All 112 PM SAR missions are carried out in co-operation with the SAR Joint Co-ordination Centre, which has responsibility for search and rescue operations within the Athinai (Athens) Flight Information Region (FIR).

Eyes in Aegean skies

The other flying squadron at Elefsis is not actually part of 112 PM but is hosted by the wing. The unit, 380 Mira Aeroporiko Systema Enaeriou Elenchou & Epiris (MASEPE, Airborne Early Warning and Control Squadron) 'Uranos' (sky), it operates the EMB-145H

equipped with the Erieye radar system.

Purchased in 1999 from an Embraer, Ericsson and Thales joint venture, the jets arrived in 2004 but were not accepted until February 2009. To prepare the HAF for this new role two Saab S 100B Argus, employing a similar radar system, were leased from the Swedish Air Force between mid-2001 and December 2003.

Captain Ilias Tsitsios of 380 MASEPE says the Embraer twin-jet has improved interoperability with the various Hellenic combat units: "The EMB-145H AEW&C is a platform capable of connecting via voice (UHF, VHF, and HF) and data link (Link 11 and Link 16) with naval, ground-based and airborne assets.

"So it provides a common 'reference

datum' via which assets with different operational capabilities can be connected to exchange real-time vital information in secured/redundant networks.

"As a result, the [aircraft] has improved interoperability with regard to volume of data exchanged, time, range and number of participants."

As for the wing's challenges, Col Peros, as Force Protection Director, points to "the specificity, the diversity, the wide range and the polymorphic nature of our missions". Statistics provided by the wing indicate that between 2011 and 2015, the assigned squadrons flew a total of 28,144 missions, involving 47,794 sorties. In all, these amounted to an impressive 64,370 flight hours.



Top: The HAF has 15 C-130B/Hs in service, though in various states of operational readiness due to ongoing updates with HAI at Tanagra. Two C-130Hs have been written off (748 on February 5, 1991 and 750 on December 20, 1997). **Above:** Embraer 135 serial 135L-484 carries the name 'Nefeli' (cloud). **Left:** Greek Army Aviation C-12R/AP serial 402 (c/n BB-1733) pays a visit to Elefsis. This camera-equipped aircraft is assigned to the 4th Army Aviation Battalion (4 TEAS) at Megara and is one of two examples acquired in 1999.

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