



Air war analysis

Above: Spanish Air Force KC-130H TK.10-07 '31-52' serving with Ala 31 and operating in support of a CAR mission out of Libreville, Gabon. Below: A Joint Terminal Attack Controller with the Portuguese airborne unit prior to despatch to the northeast during recent bush operations in the CAR. Bottom: Seen at a remote strip in the interior of the CAR, South African-registered L-410UVP-E20 ZS-ATD/UNO-300P is one of the UN aircraft that brings in personnel and supplies.



dismounted and took up defensive positions as an unidentified armed group approached. Similar restrictions apply to aircrew operating out of Bangui M'Poko International Airport, almost all servicing flights to the interior of this vast African state that lies just north of the Congo. Flying a range of transport aircraft, mostly jet-powered An-72s, but also various propeller-driven aircraft, crews are billeted behind some of the heaviest defences on the African continent, where access is strictly controlled by the French Army.

The civil war in the CAR cannot be considered a major conflict compared to those in the Middle East and Asia, but it is sufficiently widespread in this former French colony, fractionally smaller than Texas, for the United Nations (UN) to have committed a force of almost 15,000 personnel (11,000 contingent troops) in a bid to limit the spread of violence. I had requested to be embedded with one of the UN fighting units, a crack 180-man Portuguese Army Paraquedista (paratroop) unit that calls itself the Rapid Reaction Force (RRF) and which had already achieved fame in Afghanistan. In his book Taking Command, former British Chief of the Defence Staff General Sir David Richards called them his "best fighting unit" when he was in command of coalition forces in Kabul. The war in the CAR, although sporadic, is serious enough to occasionally involve French fighter jets stationed at N'Djamena, the Chadian capital. This has happened several times, usually to intimidate rebel groups from advancing towards UN defensive positions.

Mirage missions

The UN has disclosed that Armée de l'Air (French Air Force) Mirage 2000s have conducted missions over the northern town of Kaga Bandoro to prevent armed groups from assembling forces to march on Bangui, where operations have been taking place to clear Islamic-orientated suburbs of militants, the majority of which are armed. There are two such areas in the capital, PK-3 and PK-5, both labelled by the UN's Mission Multidimensionnelle





Intégrée des Nations Unies pour la Stabilisation en République Centrafricaine (MINUSCA, Multidimensional Integrated Stabilisation Mission in the Central African Republic) as 'no-go' areas. The UN has officially labelled the dissidents as criminal elements and the Portuguese RRF has conducted a number of operations in both areas.

There are other issues that constantly come into play. Hostilities originally started in 2012 with a mainly Islamic rebel force calling itself Séléka (Coalition), which invaded the country through its two northern neighbours, Sudan and Chad. The insurgents began by slaughtering every Christian community encountered in their push southwards towards Bangui, which they took two years later, forcing the president to flee. This was not a simple matter. The country's Muslim community is modest compared to the bulk of the population, which has historically been Christian or animist. Once the killings had

started, non-Muslims rallied under the banner of a movement known as anti-balaka. In the process more than a million people, in a nation of barely five times that number, fled their homes. The death toll remains uncertain, but casualties are thought to be well into six figures, the majority being of Islamic persuasion.

MINUSCA air wing

A lot changed when the UN took matters in hand in 2014. Initially under French control, it established MINUSCA, which remains, like the small French security force, headquartered in Bangui. At its head is General Balla Keita, a Senegalese former commando officer in overall control of all UN military matters in the country. Under Keita's command, which includes all UN fixed-wing aircraft, there is also a helicopter air wing of two Pakistan Air Force Mi-17s and, until recently, a pair of Senegalese Mi-24 Hinds, one of which was lost during ongoing actions against armed groups while I was in

the country. A devout Muslim himself, and not afraid of tackling problems at source, the general is held in great esteem by all the European senior officers in the region. He, in turn, displays great affection for the Portuguese RRF under his command, referring to it as "my personal Cristiano Ronaldo squad", and is on record as stating that "I give those fellows impossible tasks and they follow my orders to the letter... they are tough, forceful and organised". Big, bluff and at times intimidatingly forthright, Keita is not afraid to resort to military action in a civil war in which Islamic radicals are pitted against a majority of Christians and animists.

It is worth mentioning that the RRF has distinguished itself in several dozen contacts over almost three years against what is clearly a resilient and mobile enemy. The unit has not suffered a single fatality in the process, with only a handful of its members having been wounded, none critically. Asked how he was dealing with local politicians, Keita was disarmingly candid: "I do not trust them... How can I when most have already moved their money and their families to Europe? These are really not the sort of people who have the interests of the people of the CAR at heart."

Also noteworthy is the fact that the no-nonsense Keita has tended to tackle ongoing issues at their root, including despatching UN forces to subdue some of the Jihadi armed groups still fomenting revolution in the nation's interior. There are 14 such hostile armed groups still active in the CAR and almost all have Russian private military contractors (PMCs) serving within their ranks, usually billeted in their own camps adjacent to the main concentrations of fighters. For their part, the Russians have repeatedly stated that their nationals attached to armed groups in the CAR have no military role, but are there in a "strictly advisory" capacity. The number of Russian PMCs involved with armed groups in the country is currently said to be well into the hundreds, although communications with the interior remain patchy and exact figures are difficult to verify.





Above: AFM's Al Venter (centre) with members of a UN-linked Portuguese paratroop squad at Bangui Airport in the Central African Republic last September. Top: A United Nations 'Hind' over a Portuguese Rapid Reaction Force protected convoy during operations in the interior of the country.

Air war analysis

Dealing with mercenaries

In a recent interview with the author, French Brig Gen Eric Peltier, head of the multinational European Training Mission (EUTM) at Camp Moana in Bangui, declared that any Russians attached to still-hostile armed groups were regarded as mercenaries. They maintain close links with Moscow and their numbers range from perhaps five or eight to several dozen men per combat unit. Some officers of what is now a series of irregular squads totalling several hundred men have made approaches to talk to him, Peltier confided, "but I will not deal with mercenaries... which is why I spoke to the Russian ambassador here in Bangui about the matter and a liaison officer has since been appointed at the [Russian] embassy to deal with these matters". It also emerged during that discussion that the state-of-the-art weapons currently being supplied to these hostile armed groups were almost all new, supplied either by Russia or China. Most had been smuggled into the CAR in container convoys, customarily routed through either Sudan or Chad.

It is also highly likely that since roads in these neighbouring countries are few and the majority in abysmal condition, none of this gun-running could have taken place without the collusion of the relevant governments; Brig Gen Peltier suggested that the CAR had six such neighbours "and all six are playing their own political games" in this conflagration. He also disclosed that almost all funds supporting those dissident armed groups came from several Arab states in the Middle East. He proceeded to name them, but specifically asked that details not be published.

Another source at EUTM headquarters suggested that almost all the armed groups were now supported by so-called 'technicals' – armed pick-up trucks with heavy weapons mounted on their flatbeds either of 12.7mm or 14.5mm calibre. It was common knowledge, the source declared, that several UN aircraft operating in CAR airspace had come under fire in the past, including the Pakistani and Senegalese helicopters.

While it is well known that the Khartoum government of Sudan's deposed President Omar al-Bashir fomented revolution far beyond the frontiers of its own country, not a lot has changed with the regime that replaced it. Indeed, Sudan is just as much involved in supporting rebel armed groups today as it ever was, only now with Russian mercenaries marshalling their efforts too. The Republic of Chad has also played a somewhat ill-defined role in subverting the Bangui regime, despite



Above: Troops are airlifted into action aboard a UN 'Hip' during anti-armed group operations in the CAR. Below: A United Nations 'technical' with a mounted Russian ZPU-2 14.5mm heavy machine gun guarding Bangui Airport, one of the most heavily defended in Africa.



France having established the headquarters of its ongoing West African anti-insurgent Opération Barkhane in N'Djamena in 2014. Several squadrons of French aircraft as well as a 3,000-strong French ground force, backed by troops from Mali, Chad, Niger, Mauritania and Burkina Faso, are also part of that defence equation. Chad is enormous, twice the size of the CAR, and the N'Djamena government is not in total command of the entire country, especially those areas bordering Sudan and in Chad's far south, towards Cameroon and Bangui's domains. For instance, several senior officers in Banqui admitted that the Russians had no problem bringing containers into southern Chad from Sudan. They knew it was happening, but a good proportion of the frontiers are raw jungle and border controls almost non-existent. "If the convoys transporting these weapons are stopped, a quick exchange of cash usually solves any delays," one of them declared. Furthermore, the Chad and CAR governments

have maintained an uneasy relationship for decades. Both achieved independence from France more than half a century ago and disputes are regular. It deteriorated so much that the matter was taken up by the UN Security Council in April 2014, after Chadian soldiers killed 30 civilians and wounded 300 more during a marketplace attack in Bangui. At that time Chad was part of the African Union Peacekeeping Mission in the CAR, but as one official declared at the time, you first have to achieve peace to be able to keep it, and that was not the case. It is noteworthy that exactly the same situation holds for today.

Hind down

A major nine-day operation was launched in September 2019 against one of the CAR's most active armed groups, which was terrorising a large area adjacent to the border with Cameroon in the northwest of the country. At the behest of General Keita the Portuguese RRF, backed by more than 50 fighting vehicles – mostly High Mobility Multipurpose Wheeled Vehicle 'Humvees' with



20mm cannon - were sent into the area, and over the following week saw a good deal of action. The general's reaction stemmed from the gathering of a large number of armed elements backed by Russian instructors and operating outside the Koui sub-prefecture, about 15 miles (25km) west of Bocaranga, one of the largest towns in the region. The arrival of the RRF was preceded by an advanced detachment sent by air, the bulk of the force covering the 370 miles (595km) from Bangui by road. Owing to poor weather and difficult terrain, it was a tough haul that lasted three days. Also, the Ione Senegalese Mi-24 helicopter gunship was forced down in peculiar circumstances and its aircrew killed on the second day of the operation. While the official UN communiqué stated that the Hind had suffered technical difficulties, the Mi-24 has two engines and it is rare for them both to fail. Intriguingly, headquarters staff back in Bangui spoke quite openly about the helicopter having been "shot down". A later comment by one of the officers made more sense: "We don't go into detail about this incident because we do not need to give the enemy any kind of psychological advantage."

During the movement of the motorised column to the north, matters were made more difficult owing to numerous tropical waterways that required the construction of improvised bridges able to take the weight of the heavy Portuguese 8x8 Pandur armoured vehicles with all-steel welded hulls. Also, there was a very real prospect of an enemy presence in this isolated region. Top cover for protection against ambushes was provided throughout by both the Senegalese Mi-24 and a Pakistani Hip accompanying the column, although this did not prevent the force from coming under attack several times. It was noted that, unlike in earlier attacks, the rebels spent considerable time and effort laying out textbook 'L-shaped' ambushes, suggesting they had learned from their Moscow instructors. Several of the vehicles took direct hits and while a few men suffered minor injuries, there were no serious casualties.

With the arrival of the Portuguese force at Yade, about 12 miles (20km) southwest of Bocaranga, on September 26, 2019, both the air force element and Raven unmanned aerial vehicles (UAVs) of the Portuguese Army monitored the opposing armed group fleeing into the jungle. The group's Russian 'instructors' had apparently departed a day or two before, having been given word by unknown Bangui sources of the approaching column.

The region in which the fighting took place is adjacent to the northeastern border with



Cameroon from where there is considerable infiltration into the CAR. Brig Gen Peltier confirmed that this was a comparatively new development with serious, long-term implications for the entire region for several reasons. First, earlier Séléka incursions into the CAR had entered the country through Sudan. The new infiltration route through Cameroon's southeast border lay roughly 370 miles (595km) further to the west, indicating a substantial escalation of hostile activity in vulnerable areas open to exploitation by Islamic Jihadis. Secondly, and even more importantly, Cameroon is now increasingly involved in the kind of Islamic insurrection that has become prevalent further north, especially in Mali, as the Republic of Cameroon Armed Forces is now fighting Boko Haram terror groups along its northwestern border with Nigeria. Concurrently, the Cameroonian government is also trying to counter infiltration from Chad through its northeastern frontier region. In his interview, Brig Gen Peltier confirmed that this was a

During the course of the Portuguese onslaught in the CAR's north, a telling comment was made by a retired senior UN officer, a former colonel in the South African Army's Special Forces, who had served for many years in various conflict countries including Somalia, Afghanistan, both Sudans and others. Having been briefed on the objectives of the RRF in the CAR, he declared that the Portuguese had demonstrated for the first time what all member state troop-contributing countries should do in such circumstances. He went on: "My experience is that peacekeeping forces are very seldom willing to engage proactively in combat, for the simple reason that member state contributing countries release their forces with so many restrictive conditions that it is almost impossible to get the peacekeeping mission's mandates implemented. Moreover, most of them are illequipped, not well trained, sometimes badly disciplined and most have more of a regimental inclination than combat readiness." AFM



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The so-called Islamic State - formerly active east of Suez - has opened up a new insurgency front in parts of the Democratic Republic of the Congo (DRC) adjoining Rwanda and Uganda. It claimed its first combat victories in that region in mid-2019.

Additionally, the Somali-linked al-Shabaab terror movement has been active in northern Mozambique's Cabo Delgado and Niassa provinces for the past two years. It gets its name from some of its Jihadi combatants having been trained by al-Shabaab in Somalia.

In a bid to halt further escalation, the Maputo government called on Russia's paramilitary Wagner Group to help, followed by the urgent dispatch of men, aircraft and helicopters to Nacala, Mozambique's biggest airport in the north.

In the first part of this feature (see part one, February, p70-75) we saw the effects of guerrilla warfare in the Central African Republic (CAR). That has further expanded with a small-scale war against the Nigerian-based Boko Haram Jihadi group in northwest Cameroon. Additionally, the Wagner Group has now been contracted to fight Boko Haram in northeast Nigeria.

Somalia's war, though low-key, continues, to the extent that a group of South African pilots are in the process of negotiating a training deal in Mogadishu that could see the insertion of a squadron or two each of Mi-17s and Mi-24s. A similar scenario is taking place in Niger, which is already host to the largest US-supported unmanned aerial vehicle (UAV) facility in Africa, operating from a remote base north of Niamey, the country's capital.

Security has also been upgraded in three more West African countries: Senegal, Burkina Faso and the Ivory Coast. It is noteworthy that one of the helicopter gunships recently lost in the CAR was from the Senegalese Air Force and that now needs replacing.

One of the serious problems facing United Nations military planners in New York is that African 'military playing fields' are not even.

Scores of countries involved in these so-called peacekeeping operations (an oxymoron to start with, because you need to have peace before you can keep it) are ill-prepared even

for a limited counterinsurgency conflict. The truth is, in almost all the countries

mentioned, hostilities go on

and in some of them - Mali,

and others - daily life would be impossible without powerful, mainly Western, military contingents, coupled with adequate air cover that those who oppose them lack.

There are several dozen nations involved in the CAR alone, making for an uneven mix of both motivation and commitment in a war that has claimed almost 100 UN lives since the Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA) was launched in 2014.

A pair of Mi-24 Hind helicopters came from the Senegalese Air Force, while two Mi-17 Hips were Pakistani, But, as I was to discover, there are serious differences of opinion among senior members of ground elements deployed as to their efficacy.

A constant criticism made by Portuguese troops in the field is that when contact with hostile elements is made, the Senegalese Hinds - whose single most important purpose in the war (apart from offering additional sets of eyes from on-high) is to provide air support for UN forces fighting on the ground - invariably hover over the action at about 4,000ft (1,219m) above ground level. "This is an impossible situation in terrain more often than not densely





foliaged jungle," said one senior observer. As that officer, who had solid airborne and support experience in both Afghanistan and Mali, told *AFM*: "At that kind of altitude they can see nothing of what is going on below, and certainly they are not able to distinguish friend from foe."

More disturbing, he intimated, those aircrews have consistently ignored entreaties to operate at lower, more practical levels. He explained that it was not a recent problem, but had been going on from the start of Senegalese involvement in MINUSCA.

In contrast, Pakistan Air Force personnel with their Mi-17s are a good deal more professional in operational roles. The commander of the *Hip* involved in last September's onslaught was a full colonel and had seen good action in several theatres of military activity.

When one of the Senegalese Mi-24s was lost during the author's CAR visit, his *Hip* was then tasked to take over responsibility for air cover during the course of the rest of the nine-day operation in the northeast and went on to make an extremely valuable counterinsurgent contribution, he declared.

"Their side-gunners with their GPMGs [general-purpose machine guns] consistently kept enemy

Risky business

All aircrews operating in Central African Republic airspace face a number of threats while going about their work. This particularly applies to Bangui, the CAR capital, where conditions within the local population are so desperate that expatriates working there – aircrews included – very rarely venture into town without armed escorts.

It's also one of the reasons why the entire M'Poko International Airport area is surrounded by a series of security fences which are strictly monitored by the French Army. Covering an area of many acres, these include two-to three-metre berms topped with razor wire and various other restrictions, including CCTV to prevent infiltration. All aircrews, as well as the Portuguese Rapid Reaction Force, live comfortably within those confines and are able to access their aircraft, as well as armoured vehicles, at very short notice without additional security checks.

Approaches to the airport itself by commercial air travellers are similarly protected by UN security elements stationed at vantage points in several locations, usually ensconced in vehicles bearing the UN logo and with heavy 12.7mm or 14.5mm machine guns mounted.

Things are very different in the interior of the country where UN and non-governmental organisation (NGO) aircraft are required to venture in order to perform their duties. Both the International Red Cross and Médecins Sans Frontières have their own civilian aircraft operating in and out of the capital, and there are instances of them having come under fire in the interior of the country from so-called 'armed groups', many of them hostile. With Wagner Group, the Russian mercenary organisation, now embedded with almost all of the acknowledged 14 'armed groups', these attacks are not as frequent as before, but the violence continues. There are

also smaller Jihadi groups - usually breakaway factions

from larger ones - known to have caused problems.

The few civilian pilots with whom AFM was able to speak in Bangui also mentioned fears of abduction by rebel dissidents, as has happened in the DRC and elsewhere in Africa, usually with a view to being ransomed. While there have not been an inordinate number of pilots taken hostage in Africa, it happens. Some abductions do not make the news for fear of giving rebel groups the incentive to do it more often. In theory, most companies are insured against that kind of eventuality, but it is essential to limit publicity.

There are instances of kidnappings and abductions where principals have paid good money to get their staff released, for the simple reason, as we have seen in Nigeria, that hostage-taking is how terrorists are inclined to negotiate with Western interests these days. And as long as companies are prepared to pay (as we have observed with maritime pirate actions in the Indian Ocean and off Nigeria) this sort of activity is likely to continue.

Among the more notable instances was the disappearance of American pilot Jerry Krause, a missionary who went missing from South Africa in April 2013 while on a flight to Mali.

Though since declared deceased by his own government – no traces of the aircraft or bodies were ever found – Krause's family have since received what they regard as reliable information that the pilot is being held hostage by an insurgent group linked to the main terror group operating in West Africa's Sahel, al-Qaeda in the Islamic Maghreb (AQIM).

Evidence of his survival is strong enough for the family to have turned to President Trump for help.

Another incident involved Syed Mazher, 25, an Indian pilot who was taken hostage by rebels in the eastern DRC. A group of armed rebels attacked his aircraft after he had landed at Walikale Airstrip, a bumpy track that doubles as the town's main road and is the route out for locally mined tin ore.

After lengthy negotiations that yielded nothing, he was eventually released by his captors without any ransom having been paid, but had to walk for five days through heavy jungle to reach safety.

Two UN helicopters from the local peacekeeping force had flown into the area to assist in the rescue, while the Kinshasa government provided negotiators to speak to the local militia group, known as Mai Cheka.

In another incident, three Russian pilots in Mali were said to have had a similar experience in August 2015 when early reports spoke of them having been abducted by Islamic fighters.

That event took place at a hotel that had been attacked at Sévaré in central Mali, about 373 miles (600km) north of Bamako, the capital.

The shoot-out to rescue hostages lasted a day, the Jihadi gunmen were killed, and the Russian Embassy later issued a statement that its nationals had all escaped.



1: The army operational HQ in Bangui, Lisbon's main base when fighting commenced in the north of the CAR. 2: In December 2013, USAF personnel at Bangui Airport unload cargo from a C-17A from Charleston Air Force Base, Joint Base Charleston. 3: Armed with UB-57-32 pods for 57mm rockets, Senegalese Air Force Mi-24V 6W-HCA/UNO-308P is seen serving with MINUSCA. Three former Slovak Mi-24Vs were overhauled in Poland and delivered to Senegal from February to November 2017. 4: A bird's-eye view of the Portuguese base in the unsettled city of Bambari in Ouaka prefecture, which borders the Democratic Republic of the Congo.





heads down... most times they were firing at the enemy from heights sometimes barely above the tallest forest," the officer explained.

General Balla Keita, the no-nonsense veteran Senegalese former commando officer in overall control of all UN military matters in the CAR, has faced similar problems with the ground forces of several nations under his command, though he was not prepared to name them. Indeed, when questioned, he was candid that some of these soldiers were not only badly trained, but were sometimes not prepared to make their presence felt when threatened by hostile armed units.

Other senior UN officers suggested that many were there solely for the pay packets. When pushed, quite a number admitted that they had not come to the CAR to fight, in that or any other African war.

What is surprising about many of these developments is that with the majority of countries experiencing Islamic-led unrest (with the exception of Mali and Chad where most of the aviation assets are French) almost all others prefer to buy Russian helicopters. Both the *Hip* and the *Hind* are to be found on the majority of African airports and airstrips where governments are coping with unrest.

The same applies to helicopters used by private military companies (PMCs) in Africa. In the Angolan and Sierra Leone civil wars, these former Soviet machines were almost exclusively in use. And for good reason.

Asked why just about all PMCs operating in Africa, the Middle East or Central Asia preferred *Hips* and *Hinds* to almost all others, veteran mercenary combat pilot Neall Ellis is specific. According to Ellis – who has flown in most of the countries mentioned, after serving as a colonel in the South African Air Force (he flew operationally in Afghanistan for three years and before that in the Balkans with an Islamic air group flying Mi-17s) – the main reason why African countries are mostly using Russian aircraft is because they are much cheaper and easier to maintain

than the majority of Western equivalents.
Ellis explained: "A new Mi-171 will cost around US\$15 million, while the Black

Hawk or Puma will cost more than US\$20 million, never mind the complex electronics or ultra-sophisticated support equipment required to keep such choppers or the US Apache or French Tigre in the air.

"Secondly, the Russians tend to not mix in either with politics or human rights abuses in countries in which they are involved (like Mozambique or, soon, Nigeria). They are in the business (like the Chinese) strictly for economic reasons; in other words, they

would rather their aircraft be acquired by countries facing revolt than those offered by the Americans, French or British."

He reckoned that another possible reason why there are so many Mi-17s and Mi-24s in Third World countries is arguably because Moscow has a long history of involvement in Africa. "The Kremlin has supported just about every African revolutionary movement in their bids for 'democracy', which quite often means that long-term ties remain entrenched."

Angola, Rhodesia and Mozambique are good examples of this trend, he said.

Ellis also elaborated on his own experiences with *Hips* and *Hinds*: "The Mi-8/17 is a very reliable and basic helicopter, a real 'workhorse' in fact. The systems are easily maintainable under primitive conditions in the field by a qualified ground crew and not subjected to the demands of the kind of complex, computerised avionics found in the Western choppers.

"That means the aircraft can be left unprotected in the sun and rain, which is usually the case in the majority of African countries.

"The Mi-24 in which I used to fly combat in Sierra Leone had been left out in the rain so often that its seals had perished, which meant that it leaked when it rained. But that did not stop us from going up. We had a Russiantrained ground crew, entirely Ethiopian, and they performed minor miracles keeping us operational, often having to pirate parts from a second, inoperable *Hind* at the air base outside Freetown, the Sierra Leone capital."

Ellis went on to suggest that in his opinion, the Mi-8/17 "is a much sturdier helicopter than similar class models that Western industrial complexes produce". It was also able to operate more efficiently in high-density altitude conditions, he claimed.

"During my time in Afghanistan, we were able



Above: The view from the cockpit of a Mi-24 gunship as it escorts a convoy along a jungle road. Ambushes were commonplace prior to the arrival of Portuguese airborne units. Below: 'Everything apart from the kitchen sink' loaded on board one of the Pakistan Air Force 'Hips' heading north in the CAR.



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to lift heavier loads over a greater distance than any other comparable helicopter. As an example, I had an engine failure while flying from an outlying base to Asadabad, east of Kabul and close to the Pakistani frontier. We were flying at an altitude of 10,000ft [3,048m] in order to safely cross the mountain range, with a half-load of freight, six passengers and the fuel tanks half empty.

"When the engine failed, we were fairly close to Asadabad, so I elected to carry on to our original destination and was able to steady the descent and maintain an altitude of 8,500ft [2,591m] all the way to Asadabad. Once there, I managed a safe landing.

"I doubt whether any other helicopter in the 'medium transport' class would be able to perform under similar circumstances."

Ellis also admitted to being a fan of the Mi-24, but did not believe that the *Hind* is the ideal helicopter for low-intensity conflicts.

"It is too heavy and not as manoeuvrable as some of the latter-day chopper gunships. For a 'rebel type' of warfare, I would prefer a more compact and light helicopter – something as rugged as the old French-built Alouette III, as fast as the Agusta 109 and the ability to haul the load of an Aérospatiale Puma.

"However, one has to acknowledge that this combination is simply not possible, so my choice of helicopter for the kind of low-intensity warfare encountered today in parts of central and east Africa is the MD Helicopters MD 600N.

"The reason for my choice is because this is the 'most silent' helicopter on the market, has ample space in the rear compartment to mount a side-firing weapon and provision for forward-firing weapons. More salient, the bubble canopy offers exceptional visibility.

"What many military planners do not factor into their reckoning is that the majority

Drones have become as much a feature of CAR operations is the men handling them.

of targets in low-density conflicts are

Additionally, reflected Ellis, the Mi-24

of targets in low-density conflicts are primarily people operating on foot or on motorcycles on the ground and not hightech vehicles or weapons systems that require any sort of stand-off distance.

"Also, when combating rebels in the kind of thick bush or jungle terrain encountered in places like the CAR, northern Mozambique or Cameroon, the helicopter needs to have an actual visual sighting of the target. This, in most cases, is only achieved from flying at very low levels, all the while looking down and under the vegetation to physically acquire the intended target."

Additionally, reflected Ellis, the Mi-24 does not have the manoeuvrability to fly a tight orbit above a small section of rebel troops. More to the point, in order to attain that tight orbit, speed has to be lowered.

He went on: "And of course, 'low send' means a relatively easy target for ground fire."

Another negative, he reckoned, is that the Mi-24 does not allow the aircrew the same outside visibility that smaller and lighter helicopters generally have.

"However, a major plus is that the *Hind* has a fairly extensive range and can carry a good selection of weapons."

