Most people think of peacekeeping only as ground operations performed by soldiers wearing blue helmets. In fact, peacekeeping has evolved considerably beyond the two surface dimensions to cover the third dimension as well: airspace. The peacekeepers of the air also make a vital contribution to peace and stability in conflict-ridden zones around the world. But the story of air power in UN peacekeeping has hardly been told. To students and practitioners of air operations, it appears as a major gap in the public, professional and academic literature – one that needs to be filled.

In peacekeeping, as in conventional military operations, air power offers four core capabilities: transportation, observation, communication and firepower (destruction). Simply put, aircraft provide means to *carry*, to *see*, to *signal* and to *shoot*. Aircraft are also a means to show presence, though the value of this presence lies in the ability to do the other four things.

In fact, almost all air power functions derive from these four basic capabilities, which are sometimes combined during a single flight. For instance, an armed helicopter might carry soldiers or peacekeepers into a conflict-ridden zone, observe the movements of opponents, relay orders or signals to ground forces or drop leaflets for local civilians and, if necessary, fire upon those who attack the peacekeepers or civilians.

Each of these air capabilities can contribute significantly and are well worth examining in detail for the applications in peace operations. The first, transportation, involves more than deploying peacekeepers into the host country and inserting/extracting them in precise conflict zones. It also means moving vast quantities of equipment and supplies to sustain not only the peacekeepers but

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also the “peacekept” – the local population and displaced persons. For instance, the United Nations Humanitarian Air Service (UNHAS), run by the World Food Programme based in Rome, charters over 50 aircraft at a given time to help the humanitarian community, including UN agencies, governments and non-governmental partners. Transportation includes medical evacuation (air “medevac”) for fast transport of peacekeepers and civilians to hospitals.

Aerial observation, the second capability, can be as simple as a pilot viewing the ground while transporting personnel and goods. But to verify complex peace agreements and to prevent the spread of deadly conflict, peace operations need dedicated surveillance flights, including to monitor raging battles from above. Furthermore, many violations and atrocities in armed conflicts such as surprise attacks and the smuggling of arms, precious minerals, and human beings, are carried out at night. So the United Nations also must overcome the night barrier by using airborne night vision equipment, which few missions have done. One successful case is the use of unmanned aerial vehicles (UAVs) in the UN mission in the Congo, where the UAVs were equipped not only with infrared cameras but also synthetic aperture radar to spot movements of rebel forces and smugglers.

For the third basic capability, communication, aircraft can broadcast or convey messages. Acting as mobile relay stations, they can also boost electronic signals from ground transmitters to locations beyond the source’s line of sight. Hence, high-flying aircraft can pass communications to other aircraft or ground forces much further away or over difficult terrain. They can also broadcast messages to the wider public through radio, television, the Internet or by simply dropping leaflets. For instance, a Brazilian battalion in Haiti used a small UAV to drop leaflets over Cité Soleil to instruct gang members who controlled the area that they should give up their arms and surrender before the start of the UN’s robust enforcement operations in 2006/07.2 (Some militia obeyed but the UAV was also shot at from the ground.) In addition, aircraft can potentially jam unwanted communications, such as hate radio broadcasts that inflame conflict. The Canadian general Roméo Dallaire wished he had possessed that capability in Rwanda to cut off the broadcasts of Radio Télévision Libre des Mille Collines that were used to incite attacks during the 1994 genocide.

While peacekeeping is meant to de-escalate violence, it is sometimes necessary to use force to stop force. When attacked, UN peacekeepers have a right to defend themselves, including the right to call in close air support. Furthermore, in the twenty-first century, UN missions have a wider responsibility to protect civilians under attack or threat, requiring rapid and forceful responses, sometimes by air. Such a combat capability, sometimes called “kinetic air power,” is the final of the four core capabilities. The armed helicopter, the Mi-24, has become an iconic and somewhat ironic symbol of robust UN operations. Once an instrument of suppression and dictatorship, the Russian-made helicopter is now used by the United Nations as an instrument to prevent aggression and oppression, proving its worth in the Democratic Republic of the Congo (DRC), Darfur, Liberia, and the Côte d’Ivoire. In the latter case, the UN’s Mi-24 from the Ukraine flew alongside French Gazelle helicopters to combat the renegade forces of former President Laurent Gbagbo and to force his removal from the presidential palace after he refused to acknowledge elections results and step down.

The usual mission of peacekeepers is, however, very different from that of warfighters. Rather than gain victory on the battlefield, the United Nations seeks a negotiated settlement so that the conflicting parties can live in peace for the long term. In his article “Peacekeeping at the Speed of Sound,” John Hillen observes that UN peacekeeping emphasizes “restraint, perseverance and legitimacy” as opposed to “offense, surprise and mass.” Using the four facets of air power can facilitate negotiations and peace processes, including judicial ones. The leaders or representatives of the conflicting parties can be transported to negotiations by UN aircraft which are later used for peace enforcement and, in some cases, to transport these leaders to tribunals or the International Criminal Court if they violate war crimes or crimes against humanity (as was the case for former president Gbagbo and another African dictator and Liberian war criminal Charles Taylor).

Admittedly, the operation of aircraft in UN peacekeeping has some drawbacks and disadvantages for the world organization. First, they are expensive to operate: US$1,000 to $5,000 per flying hour is typical (personnel included). But this relatively high cost must be measured against the time


savings from rapid air transport and, in some cases, the impossibility of moving personnel or equipment into remote areas by ground transportation. Second, the use of aircraft can be dangerous, as terrible crashes in UN history have illustrated. One of the UN’s most prominent Secretaries-General, Dag Hammarskjöld, lost his life in 1961 in a plane crash, reportedly caused by pilot error. In Haiti in 2009, a CASA-212 accidentally crashed into a mountainside, killing all 11 peacekeepers aboard. Hostile ground fire has also downed aircraft. A Canadian Buffalo resupply aircraft was shot down by a Syrian surface-to-air missile, killing nine Canadians, on 9 August 1974, a day that Canada now marks annually as Peacekeepers’ Day. In Angola, rebel forces shot down two UN-leased aircraft (L-100 and C-130) within a two week period in 1998/99. In Sarajevo in 1992–1995, UN peacekeepers in C-130 Hercules aircraft were told to sit on their helmets because of the risk of hostile ground fire that could easily pierce the air frame. Overall, however, the UN’s flying record is impressive, given that its flights are made in some of the most conflict-ridden parts of the world with infrastructure. Impressively, the UN mission in the Democratic Republic of the Congo the worst has the largest aircraft fleet in Africa and an enviable air safety record compared to others operating in the dangerous conditions of the continent. The aerial operations in DRC have been the most advanced of any peacekeeping operation to date. Moreover, the UN’s extensive experience in the Congo provides an excellent case study of how air power in peacekeeping has actually occurred over time.

Air Power in the Congo

The first peacekeeping operation in the Congo in the 1960s was the UN’s baptism by fire in nasty internal (intrastate) conflicts. For the first time, United Nations had to deal simultaneously with coups d’état, secessionist provinces, tribal wars, ethnic massacres, and very real threats to its own personnel, including from air attacks. Notably, a lone Fouga Magister jet trainer flown by a mercenary pilot against the nascent mission was able to paralyze UN efforts and embarrass the entire international community. The United Nations was obliged to participate in an aerial arms race with the Katangan province in order to protect itself and prevent the breakup of the newborn country.

At the start of the mission in 1960, the United Nations had to bring over 20,000 troops into the vast Congolese territory, requiring a powerful
airlift capacity originally provided by the US Air Force. Aerial reconnaissance, provided by Swedish J 29 jets, was essential to predict and pre-empt Katangan attacks on UN forces. In tandem, leaflets were dropped above the residents of Katanga by air, informing them that the UN force was a mission of peace. Soon, over a dozen nations contributed, putting a strain on multilingual airborne and air-to-ground communications. But bombers provided by India were able to destroy airfields used by the mercenaries. In Operation Grand Slam of December 1962/January 1963, close air support from Swedish jets assisted ground forces to assert the UN’s freedom of movement and to capture key airfields and centres in Katanga, finally winning both the war and the peace. Thus, the mission made use of the four facets of air capability – that is, transport, surveillance, communication and combat. For this reason, UN personnel rightly boasted that they had created the UN’s first “air force.”

The mission was in many ways a precursor of the robust multidimensional missions of the twenty-first century. Indeed, the United Nations found itself learning both old and new lessons when it launched another mission in the same country in 1999. The Mission de l’Organisation des Nations Unies en République démocratique du Congo (MONUC) was originally designed as a small, non-kinetic mission tasked with assisting the implementation of a peace agreement and the liaising between conflict parties. But within three months it was given a robust mandate in Security Council resolution 2000 to “take the necessary action” under Chapter VII (enforcement) of the UN Charter.

The “protection of civilians” mandate was overwhelming for the mission because of fierce fighting between ethnic groups and interventions by forces of neighbouring countries. So, in 2003, the United Nations sought help from the European Union (EU), which sent a French-led force under Opération Artemis. It was a short-term deployment, only three months, but it showed the United Nations how air power could be used, once again, to carry, see, signal and shoot. The transport aircraft group comprised aircraft from Belgium, Brazil, Canada, and the United Kingdom, in addition to the main provider, France.  

4. Philippe Wodka-Galien, “The Tricolor Aloft”, Journal of Electronic Defense, March 2004, vol. 27, issue 3, p. 57 For example, the Canadian Forces provided logistics support in the form of two Hercules transport planes, even though this was an EU mission.
vide heavy lift. Mirage F-1s flew above to make sure that the forces were inserted safely. The day after the arrival of EU forces, combat air power was utilized repeatedly, including laser-guided bombs dropped from Mirage 2000D jets. Air strikes utilized ground forces including highly trained Joint Tactical Air Controllers to help designate the targets for precision munitions. Especially for close air support (CAS) operations, friendly and opposing ground forces need to be clearly distinguished. Aerial reconnaissance and surveillance were also provided by the French Mirage fighters.\(^5\)

As MONUC took over responsibility from the European force in September 2003, it managed to acquire observation and attack helicopters from India that immediately proved their worth, though they were initially not permitted to fly at night for safety reasons and were too few in number to cover the vast territory of the eastern DRC effectively. Nevertheless, the Mi-35 attack helicopter became a symbol of robust UN peace operations, and the mission was increasingly able to fulfill its Chapter VII mandate. A powerful surveillance, troop transport, and weapons platform, the Mi-24 helicopter and its upgraded export version Mi-35 had been designated the “Hind” by the North Atlantic Treaty Organization (NATO) during the Cold War. Used by MONUC since 2004, the four Mi-35 were equipped with state-of-the-art surveillance systems. Though the sensors are designed for target identification and engagement, they have also been used extensively for area reconnaissance in the eastern Congo. In addition to a colour television camera, the helicopters were equipped with fourth-generation, forward-looking infrared (FLIR) cameras and the crew was equipped with special goggles for night flying. The night flights detected hidden militia camps operating with the intent of threatening and overwhelming Goma. Since the local militia often moved forward at night to prepare for dawn attacks, the FLIR provided crucial intelligence on growing threats.

A rebel group known as the CNDP (Congrès national pour la défense du peuple, or National Congress for the Defence of the People) attempted to attack Goma in 2006 and in 2008. In both cases, the Mi-35 helicopters aided the ground troops of MONUC and the Congolese army (the FARDC) by determining the exact locations of the rebels and, when necessary, aiming rockets or machine-gun fire directly at them.

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Local UN ground commanders often called for helicopter backup upon being attacked. The local MONUC commander radioed the helicopters the positions of UN ground forces. The friendly DRC army, unable to communicate on UN radio channels, identified its own positions using smoke and white flags. Rebel positions were confirmed by the helicopter crew using visual observation and the Mi-35’s sensors. Typically, the helicopter would carry out dummy dives to warn and deter the CNDP elements. If the CNDP cadres continued to threaten UN forces, the helicopter fired a warning shot. When rebel firing continued, salvos of rockets were launched on the rebel position. This usually caused the CNDP to pull back and stop shooting. Typically, missions were accomplished without any collateral damage and fratricide thanks to the accurate firing from the attack helicopters. Though fired upon, the armour of the aircraft was able to withstand bullet penetration and so prevented crashes.

A recent development of air power in the UN’s Congo mission has been the addition of unarmed unmanned aerial vehicles (UAVs). Though a Belgian UAV system was deployed to the Congo for several months in 2006 to assist the UN with its election efforts, UN attempts to acquire its own unmanned aerial assets were prevented both by Security Council concerns of the UN’s role as an intelligence-gathering agency and by procurement problems. Finally, after decades of modern militaries using surveillance UAVs in operational theatres (including American UAVs in Bosnia in the early 1990s and NATO UAVs in Libya in 2011), in late 2013 the United Nations contracted a UAV System from a Selex ES (division of Finmeccanica), including four Falco UAVs. So far, these drones have proved to be a significant asset to the mission’s air power, helping to address a critical disadvantage that has continually plagued the Congo operation: its small surveillance coverage. The drones have been particularly effective in night surveillance, using both infrared cameras and synthetic aperture radar to create high-resolution images of the conflict environment. This experience has shown that UAVs can serve as potent force enablers and force multipliers to make peacekeeping ground troops better informed and better able to defend themselves and civilian populations.

The Future of UN Air Power: Filling the Gaps

Though the United Nations has demonstrated air power in the four core capabilities of transportation, observation, communication, and firepower, it is still far from making good use of these in the field. In the current 16
UN-led peacekeeping operations, most only use aerial transport and ignore the other capabilities. Significantly, the United Nations still does not own any of the aircraft that it uses, and must rely on the political willingness of Member States to provide the aircraft or commercial industry to lease them.

The US Government has a history of providing heavy air lift for the initial deployment of peacekeepers but the UN’s transportation needs are now much greater than what the US provides, particularly to sustain operations over the long term. Additional strategic-lift partners are needed. After the end of the Afghanistan mission, perhaps the European Union will come to rival the US in aerial transport support? The United Nations also needs to develop its own robust system of air transportation. The Chief Movement Control Officers in UN missions require a greater capacity to get personnel, equipment, and aid to where they are needed most. This is particularly true when peacekeeping operations take place across vast conflict areas, as is the case in the current operations in the Central African Republic and the DR Congo, which is the size of Western Europe.

Fortunately, new technologies are becoming available both among UN member states and in the commercial sector for transport. For instance, precision air drops can be done from aircraft using GPS-enabled kites or steerable parachutes. These systems can land softly so as not to endanger people, like refugees or displaced persons, eagerly awaiting below for supplies. Already cargo UAVs are capable of transporting critical goods to conflict zones.

The modern sensor revolution will allow the United Nations to get progressively much better aerial and satellite imagery that can assist its observation role. In the past, UN missions were unable to gain comprehensive situational awareness, covering the range of actors and conditions in the field. Where are the armed combatants located? Who fired first? Who is attacking civilians? Who is exploiting the natural resources, legally and illegally? Where are the refugees? And if they are on the move, what direction are they headed in? What are the conditions of the roads and bridges on which the peacekeepers and the “peacekept” must travel? The answers to these pertinent questions and many more can be greatly aided by advanced aerial reconnaissance. Aircraft generally get to the observed targets faster than ground personnel; they can cover more territory in a flyby or can loiter on station; and they offer a different but complementary (bird’s-eye) view to land-based observers. Addi-
tionally, aircraft can remain at a safe distance above most raging conflicts to avoid risk to the observer. Fortunately, the United Nations is now more open to accepting advanced technology than ever before, with the adoption of a recent Expert Panel report on the subject.  

Since the experiment with UAVs in the DR Congo has proven successful, the UN is now trying to deploy such commercial UAVs for observation in other missions, including in Mali and the Central African Republic. As well, national contingents are now deploying with small UAVs as part of their national kit. While the system in the Congo was provided by a contractor, future systems could be larger and more advanced, especially if provided by governments, who might be referred to as “technology-contributing countries” (TechCCs) to complement troop contributing countries (TCCs). By being able to observe the movements and activities of armed groups in remote or dangerous areas, UAVs aid in conflict resolution. They can also act as a deterrent presence since combatants usually do not want to be seen to be violating agreements or the laws of war. Even the sound of unmuffled drones in the air also can serve the purpose of UN power projection. Laser pointers operating in the visible spectrum, in addition to infrared lasers, can be used to warn belligerents and criminal wrong-doers that they are being watched. If possible, the United Nations should commission its own fleet of unarmed white-painted UAVs to be used in peacekeeping and fact-finding operations across the globe.

*Communications* technology is essential to all missions but the UN has been slow to make use of signal-extending aerial assets. The world organization lags far behind developed national militaries and the NATO alliance. Yet when used properly, even simple communications like dropped leaflets, jammers, and loudspeakers can be effective forms of non-kinetic air power. Owing to the multifaceted nature of most modern peacekeeping operations, air communications can be used simultaneously to reassure civilian populations of their protection by UN forces and to deter belligerents.

The United Nations is often criticized for not using enough *firepower* to uphold international law and maintain the peace. There are tragic examples of the UN’s lack of robust and forceful responses to aggression and genocide, for instance in Bosnia in 1992–1995 (especially Srebrenica) and in Rwanda in 1994. But there are also some cases where the United Nations

Nations and allied forces have used excessive force. For example in Somalia in 1993 the US and the UN became part of the civil war by seeking the capture of a Somali warlord, leading to attacks against US and UN forces, including rocket-propelled grenade attacks on US Blackhawk helicopters, causing the US and eventually UN withdrawal from the war-torn country.

Yet kinetic air power has proven to be a useful tool in the arsenal of the United Nations. The use of aerial firepower has been identified as a key contributor to the cessation of hostilities in the Ivory Coast in 2011 and the arrest of Laurent Gbagbo, currently awaiting trial in The Hague. Similarly, the use of three Rooivalk helicopters in the UN’s Force Intervention Brigade in the eastern Congo was an important factor in the successful neutralization of certain rebel forces. Despite being first and foremost a force for peace, modern peacekeeping is understood to require the use of carefully controlled firepower.

**Conclusion**

Though the United Nations is unlikely to obtain all the aerial capabilities it needs to keep the peace, it can benefit by working with countries and regional organizations that have substantial air power in each of the four facets of air power. The UN’s response to the conflict in Bosnia, though weak at first, eventually proved successful with support from NATO transport, observation, communication and firepower. In Operation Deliberate Force, NATO flew over 3,500 sorties (flights) against over 300 individual targets that brought the Serbian side to the negotiating table and agreement to the 1995 Dayton Peace Accords. Similarly, the French Air Force has been instrumental in boosting UN peace efforts, for example in Cote d’Ivoire, and more recently in Mali where French transports and fighter jets were used to full effect. Though the first priority is to improve and evolve the independent air power capabilities of the United Nations, strategic partnerships with the engaged air forces of member states are needed. Countries like the United States who are reluctant to provide “boots on the ground” can provide “wings in the air.” These are critical enablers for UN operations that are less available from the developing world. France and other European Union countries are even better positioned because they have the ability to provide peacekeepers both in the air and on the ground. Such solid contributors will be the key to developing and expanding air power in all four facets to meet the demand for robust UN peacekeeping.