

## Preface\*

Most people think of peacekeeping in terms of ground operations performed by soldiers. In fact, peacekeeping has evolved considerably beyond the two dimensions of space to cover the third as well: airspace. The peacekeepers of the air also have a story worth telling. As in conventional warfare, the air campaign is a vital adjunct to the ground campaign; the two are intrinsically bound together. But the air power story in peacekeeping has hardly been told. To students and practitioners of UN operations, it appears as a major gap in the public, professional and academic literature – one that needs to be filled so all can benefit.

This eclectic volume is the first book to treat the UN's aviation experience, doing so both descriptively and critically, covering the organization's needs and means, its challenges and weaknesses. The book examines the air systems employed for UN operations – humanitarian, peacekeeping and enforcement. It illustrates the lessons with poignant historical case studies. In addition to many UN peace operations, it covers actions by UN authorized enforcers like the North Atlantic Treaty Organization (NATO) in Bosnia and Libya and supporters like the United States in Haiti.

The book's coverage is based on the core capabilities that air power provides. As in military operations generally, these capabilities are: transportation, observation, and firepower.<sup>1</sup> Simply put, aircraft provide means to *carry*, *see*, and *shoot*. Aircraft are also a means to show presence, though the value of the presence lies in the ability to carry, to observe, or to apply force. Another capability, though less important and less used, is to relay communications.<sup>2</sup> Almost all air power functions derive from the three basic capabilities, which are sometimes combined during a single flight. For instance, an armed helicopter might carry troops to a conflict zone, observe the movements of opponents, and fire missiles against those who attack the UN forces.

Each of these functions is vital, intriguing, and worth studying in detail. The first, transportation, involves more than deploying peacekeepers into the host country and inserting/extracting them into precise conflict zones (maybe called the “battle space” or even the “peace space”). It also means moving vast quantities of equipment and supplies to sustain not only the peacekeepers but also the “peacekept” – the local population and displaced persons whom the United Nations seeks to save and help. In addition, aircraft can transport and drop leaflets to educate and inform the local population and, in emergencies, provide medical evacuation (air “medevac”) for fast transport of peacekeepers and local 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, the United Nations needs dedicated surveillance flights, sometimes observing raging battles from above. Since many of the violations and

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atrocities in armed conflicts are carried out at night, the United Nations also must overcome the night barrier by using airborne night vision equipment, which few missions have done. Such devices can spot and help stop night attacks and the smuggling of arms, precious minerals, and human beings.

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 responsibility to protect civilians under imminent attack or threat, requiring rapid and forceful responses, sometimes delivered by air. Such a combat capability is sometimes called “kinetic air power” or aerial firepower; this is the third of the core capabilities. The armed helicopter, the Mi-35, has become an iconic and somewhat ironic symbol of robust peace 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), Liberia and the Côte d’Ivoire. The combat capability of the Mi-35 is usually applied only when a firefight erupts or an attack is under way, but the mere presence or sound of the heavily armed helicopter can serve as a powerful deterrent. That is the power of presence. Parties are less likely to violate peace agreements if they know that violations will be met with UN resistance backed up by robust UN air power.

The 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”.<sup>3</sup> Using all the facets of air power can facilitate negotiations and a sustainable peace, just as it can the fighting of a war.

Aircraft are sometimes used for relaying communications, bouncing signals from the ground to locations much further from their origin. Of course, aircraft also need to communicate their own information, including what they observe from the air and a host of flight details. In addition, aircraft can broadcast messages electronically to the wider public through radio, television and the Internet. Alternatively, they can jam unwanted signals, such as hate radio broadcasts that inflame conflict. (This is usually done by saturating the particular radio frequency with white noise.) Sometimes aircraft are used as mobile relay stations to pass communications to other aircraft or ground forces.

From these core capabilities a host of UN air functions are developed. For example, UN commanders sometimes place themselves aboard helicopters to oversee the movement of their troops and to observe any hostile or opposing forces. In another example, airborne search and rescue crews use aerial surveillance to locate lost persons and air transport to bring them quickly to a hospital or back to base. Similarly, the interdiction of illegally trafficked people and contraband involves surveillance (that is, spotting the illegal traffickers or goods) and the transport of troops to bring traffickers in to custody and seize their ill-gotten gains. It can also involve combat, if the traffickers put up a fight.

Admittedly, the operation of aircraft in peacekeeping has some drawbacks and disadvantages. First, they are *expensive* to operate: US\$1,000 to \$3,000 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 a plane crash in the Congo in 1961 – according to official reports the crash was caused by pilot error. Ground fire can also down aircraft or strike UN personnel aboard aircraft. In Sarajevo in 1992–1995, the 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. In Haiti in 2009, the UN's CASA-212 accidentally crashed into a mountainside, killing all 11 peacekeepers aboard. Overall, however, the UN's flying record is impressive, given that flights are made in some of the most conflict-ridden parts of the world, and that many more fatalities have occurred on the ground than in the air. Impressively, the UN mission in the Democratic Republic of the Congo (DRC) has the largest aircraft fleet in Africa and an enviable air safety record compared to others operating in the dangerous conditions of the continent.

This description of air power capabilities and challenges only scratches the surface. Answering further questions needs a much deeper study and a higher level of expertise. How were the core capabilities used in different UN missions? What has been the UN experience with air power over its history? When were combat aircraft used? With what effect? More generally, how can the UN make the most effective use of the third dimension of space?

Again, the current paucity of literature on peacekeeping does not allow a fulsome answer to these questions. To seek a fuller understanding, a workshop was held at Canadian Forces Base Trenton, Canada's largest military air base, in June 2011. It brought together military officers (mostly but not exclusively from air forces), UN officials, academics, and industry representatives. Their papers were updated after the conference to include cutting-edge developments, such as the UN's contracting of unmanned aerial vehicles (UAVs) for the DRC. These papers form the basis of the current volume. Where some gaps were found in the coverage of issues, the editor brought additional authors on board to make the book wider in coverage and deeper in depth.

The Editor was very fortunate to have Lieutenant-General (ret'd) and now Senator Roméo Dallaire, the former head of the United Nations Assistance Mission for Rwanda, provide the Foreword, in addition to the keynote address at the workshop where the general's direct experience with air power during a horrendous genocide enlightened us: he described how even the sound of incoming UN aircraft provided immense reassurance and motivation, well before its life-saving supplies were provided. Unfortunately, the combat side of air power was not applied to help General Dallaire stop the genocide and possibly save countless lives. There were only a few precedents in UN history where the United Nations used combat air power.

The first part of this book considers an early, important, and fascinating case study involving combat: the leap in air power made by the United Nations in the Congo (1960–1964). The Congo operation proved irresistible as a prime case study for the development of UN air power. In some ways the mission carried out activities unsurpassed by any peacekeeping mission to the present day. For instance, it was the only mission (so far) to use bomber aircraft. In its multidimensional application of air power it was a forerunner of the many peace operations in

the post-Cold War world. The mission saw the creation of the UN's first "Air Force", which expanded in number and type of aircraft as the world organization became embroiled in a battle to maintain law and order, and prevent secession in that newborn country. How the world organization "established this air force from nothing" is told in Chapter 1 by a key participant of the operation, Lieutenant-General (ret'd) William K. Carr, who was in charge of organizing the early air mission and who would go on later to become the Commander of Canada's Air Command. Ironically for the United Nations, the Congo mission soon became embroiled in an aerial arms race and in air-to-air combat with the secessionist Katanga province, as described by A. Walter Dorn in Chapter 2. The politics of contributing to this international adventure in the heart of Africa is told in Chapter 3 by a historian-expert on the mission, Professor Kevin A. Spooner, who uses the Canadian experience to show the challenges, politics, and dilemmas facing national contributors to the difficult and controversial mission.

After reviewing this remarkable case, with its abundance of lessons, the book explores other cases according to the three core capabilities of air power: airlift, aerial reconnaissance, and air combat. Airlift has served as the lifeline for UN missions, bringing supplies and new personnel to peacekeepers sometimes caught in battle zones or enduring emergencies. A classic UN operation, still in existence, which requires airlift at high altitude in the Himalayas, is the UN observer mission in Kashmir, which is considered in detail in Chapter 4 by historian Matthew Trudgen. He looks at Canadian decision-making to provide aircraft for transport and observation. A more recent case, with much greater sophistication, occurred after the devastating earthquake in Haiti on 10 January 2010. The UN's close work with the US Air Force is described in detail in Chapter 5 by Colonel (ret'd) Robert C. Owen, now a professor at Embry-Riddle Aeronautical University in Florida. The tremendous work of the UN Humanitarian Air Service (UNHAS) in Haiti and in other hot spots around the world is described in Chapter 6 by A. Walter Dorn and Ryan W. Cross, showing that cooperation across diverse UN agencies is possible, however difficult. For effective peacekeeping, however, coordinating contributions from UNHAS, troop contributing countries and private contractors remains a challenge.

The second capability provided by air power is surveillance, to keep a watch over conflict-ridden areas. The case for aerial surveillance, complementary to ground observation and action, is made by A. Walter Dorn in Chapter 7. He also offers, in Chapter 8, a short case study of UN aerial observation during the Lebanese civil war of 1958. Looking to the future, the expanding use of UAVs is advocated in Chapter 9 by Colonel (ret'd) David Neil, who serves MacDonald Dettwiler and Associates Ltd., a pioneering aerospace company that has operated UAVs in Afghanistan.

Moving beyond surveillance, the United Nations must often take direct action, sometimes applying sanctions on national government and leaders. No-fly zones (NFZs) are a particular form of UN sanction imposed on recalcitrant nations such as the former Yugoslavia, Iraq, and Libya in order to prevent those nations from using aircraft to suppress or bomb civilians. The enforcement of this special form of restriction necessitates both observation and a combat capability, and is often left to particular UN member states or coalitions. The Southern NFZ, imposed on Iraq after its disastrous 1990 invasion of Kuwait and its 1992 suppression of the Marsh Arabs, is examined in Chapter 10 by James McKay, a former Canadian military officer now teaching at the Royal Military College of Canada. The NFZ in the former

Yugoslavia is covered in Chapter 11 by F. Roy Thomas, a career soldier, who looks at air power from the ground during his tour as a UN military observer in Sector Sarajevo in 1993–1994.

Combat aircraft can be used in close support of ground troops or make gun, missile, or bombing runs in a standalone fashion. Close air support by the operation in Somalia (1992– 1993) is examined in detail in Chapter 12 by William T. Dean III of Air University in Alabama. A thorough scholarly overview of Operation Deliberate Force in Bosnia 1995 is provided in Chapter 13 by Robert C. Owen, who shows how NATO applied *force for peace* to back the contemporaneous and future peace operations run by the United Nations and NATO, respectively. Close air support by UN attack helicopters in the DRC (2003 to the present) is described in Chapter 14 by A. Walter Dorn using UN archival records. The most powerful application of combat capability under UN mandate was carried out by NATO in Libya during Operation Unified Protector, as documented in Chapter 15 by Swiss Air Force scholar Christian F. Anrig.

Having studied all these applications, the challenge is to be forward-looking while drawing on the lessons of the past. This is done in Chapter 16 by Kevin Shelton-Smith, the Chief of Aviation Projects at UN Headquarters and a former pilot with the Royal Air Force (United Kingdom), who has also served in industry and in UN field missions. Shelton-Smith gives practitioner insights into the United Nations of today and the possibilities for tomorrow. A further creative exploration, with bold recommendations, is offered in Chapter 17 by Robert D. Steele, who looks at how UN air power can be an innovative tool for peace. While not exactly “winged angels”, the aerial UN peacekeepers are important agents of protection and support. They are an attempt to bring the better angels of human nature to the fore. UN air power is a celestial and material representation of humanity’s concern for humanity. This book shows how air power can save lives, alleviate suffering, and build global security. But these aerial applications can be as complicated and as challenging as they are fascinating.

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<sup>1</sup> There are various ways to consider the applications of air power. The three core capabilities given here provide a simple but accurate description of the most basic capabilities, which can then be combined to carry out the vast majority of applications. Other ways of looking at military air power are found in military doctrine. For instance, the US Air Force’s Doctrine Document 1 (14 October 2011) specifies 13 “core functions”, while the British Air and Space Power Doctrine (AP3000, Fourth Edition, 2013) gives four “fundamental roles” – namely, control of the air and space, air mobility, intelligence and situational awareness, and attack. By contrast Canadian Forces Aerospace Doctrine (B-GA-400-000/FP-000, December 2010) recognizes six “functions” for air forces – namely, command, sense, act, shield, sustain, and generate, functions which are common to the army and navy. The author asserts that almost all of the applications and roles of air power can be constructed from the three core capabilities cited here.

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<sup>2</sup> In a rough comparison to the human body, the capabilities of transportation, observation, firepower, and communication, are equivalent to the legs, eyes/ears, arms, and mouth, given that the legs are used to carry materials, the eyes and ears to observe the surroundings, the arms to push or punch (and much more, of course), and the mouth to communicate.

<sup>3</sup> Hillen, J. "Peacekeeping at the Speed of Sound: The Relevancy of Airpower Doctrine in Operations Other Than War", *Airpower Journal* 12(4) (Winter 1998), 8. Also available at <http://www.airpower.au.af.mil/airchronicles/apj/apj98/win98/h> [accessed 27 January 2013]