Peace from Above: Envisioning the Future of UN Air Power[*]

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The United Nations has never had an air power strategy or an air power campaign plan. UN air power has always been on loan from donor member nations, often as an afterthought, and generally only in relation to land forces. It has rarely been used outside of normal support functions for the UN force (generally for transport), and only recently has it been used for modern intelligence-collection purposes, including imagery and mapping of unmapped territories such as the eastern Congo. It has yet to be used creatively as a primary UN function with a decisive impact, with at least two exceptions.[1] One has the impression that UN staff, despite their leavening of experts from the air staffs, of UN member states, do not really have an appreciation for all that air power might do before, during, and after UN forces are on the ground. This is a critical knowledge gap at the leadership level.

In recent times multinational air power has been used to compel (as in Serbia–Kosovo, 1999) and protect (as in Libya in 2011 – see Chapter 15), but it has generally failed to achieve its objectives. It has been very expensive and it delayed more holistic strategic coalition planning and operations. Air power as force projection and air power as a political tool are greatly over-hyped – it simply does not do all that is promised.[2]

Today's context is much, much scarier than traditional inter-state conflict, civil war, and routine genocide. Today we are looking at over 100 states in various stages of dysfunction and instability; and even very great governments such as those of Russia and the United States are increasingly being seen as "imitation" governments, unable to fulfill the role of a proper state for their peoples and the international community. Consequently, the future of UN air power can be, and should be, centered on "just in time" responsiveness to catastrophic situations and pre-catastrophic "peaceful preventive measures".[3] Both require the ability to deliver massive precision assistance from the air, and the precision multinational, multiagency, multidisciplinary, multi-domain intelligence (M4IS2) – generally open source, not secret[4] – to manage air power in context. Transcontinental airlift, the ability to carry out regional air management and cross-decking from big air to small air,[5] precision parachute deliveries, and integrated ground-to-air communications from all possible indigenous sources, as well as "peace jumpers" (explained below, under the heading "UN Air Power – Kinetic Peace from Above"), are all required.

Two recent natural disasters turned into long-term catastrophes for lack of adequate global responsiveness, the first in Haiti (January 2010 to date) and the second in Japan (March 2011 onwards). It is valuable to examine what the United Nations could have done but did not do in such instances, especially relating to air power. A UN air-power strategy and concept of operations are presented in which air power becomes central to the strategic mandate, the operational campaign plan, and the tactical employment of UN forces. But before looking at case studies and examples in air power, more context is needed, with general prescriptions. The future of the United Nations lies in the coherence of peace intelligence and the coherence of the air-power plan.

Background

Over the course of the past two decades, the United Nations has sought to evolve and mature. Although this process is far from complete, the course has been well set by the 1999 Brahimi Report on peace operations, then the 2004 Report of the High Level Panel on Threats, Challenge, and Change and, more recently, by the 2006 Report of the Secretary-General's High level Panel on System-wide Coherence: "Delivering As One".[6]

At the same time that the United Nations has been evolving, I have been a global proponent for Open Source Intelligence (OSINT) and, more recently, for its more sophisticated and expansive replacement, M4IS2.

The above two evolutionary trends suggest that the future of UN air power will be centered on global information management – using information that is unclassified and intelligence decision-support that is unclassified – to identify needs on the ground with precision and then harmonize precision delivery of specific needed items from across a very broad range of actors.

As the world grows in complexity, and particularly in demographic and cultural complexity, there is one word that must become central to UN policy-making, acquisition, and operations: integrity. The Merriam-Webster Dictionary defines it as: "the quality or condition of being whole or undivided; completeness". Integrity is not just about honor and avoiding corruption. It is about wholeness of perspective, openness to diversity of view, and the ability to embrace and apply truth. As Dr Russell Ackoff, one of the leading systems thinkers of our generation, would say, we have to do the right thing, not do (as we do now), the wrong things righter.

Table 17.1 presents a snapshot of the change between global threats of the past and those of the future:

Old (State) Emphasis	New (Hybrid) Emphasis
Inter-state conflict	Poverty
Civil war	Infectious disease
Proliferation	Environmental degradation
Failed states	Inter-state conflict and civil war
Refugees	Genocide and other atrocities
	Proliferation
	Terrorism
	Transnational crime

Table 17.1 Global threats then and now

The new threats are much more human and demand two things the United Nations does not do well now:

1. Hybrid operations with diverse multinational players sharing an operations center.
2. Deep, honest, timely decision-support not available from member nations.

UN operations demand multinational, multiagency, multidisciplinary, multi-domain intelligence. The UN missions that UN air power must support in the future are much more nuanced and much more demanding as well. It is no longer possible for a UN military or observation force to be sent into the field with a simple order to provide transport, observation, or even combat. In the future, UN air power will be essential to all forms of presence, and must excel at intelligence – decision support. It must never be fielded without its own organic intelligence collection, processing, analysis, and dissemination capability. The Member states cannot be relied upon to meet UN needs for intelligence in out of the way places they do not care about and have no relevant intelligence collection capabilities for.

Table 17.2 illustrates the changes in emphasis for UN air power operations.

Old (State)	New (Hybrid)
National security	Human security
Sovereignty	Legitimacy
Borders	Human rights
Governments	Public health
Armed forces	Precision giving
No intelligence	Precision intelligence
Veto possible/decisive	Veto unlikely/irrelevant
Marginal outcomes	Sustainable outcomes

Table 17.2 Old versus new emphasis for UN future operations

In the face of this mix of nuance and complexity, precision intelligence using all open sources of information in all languages – and the application of multinational multiagency multicultural perspectives, is the new standard. I know of no government that is even remotely close to meeting this new standard.

In the above context, the nature of UN air power changes radically, with a new emphasis (Table 17.3).

Old (State)	New (Hybrid)

Limited fixed wing
  – Imagery
  – Transport
Limited vertical/short takeoff and landing (VSTOL)
  – Gunships
  – Hand-held imagery
  – VIP transport
  – Medevac
	Contracted long-haul
	Regional management
	  – Big air/boats to small
	Long loiter surveillance
	Air-enabled M4IS2
	VSTOL for all purposes incl. gunships and medevac
	Precision cargo drops
	Peace jumpers*

Table 17.3 UN air power in the old and new paradigms
Note: * Explained later in this chapter, see: "UN Air Power ...", Step 1.

In this new era, and bearing in mind my continued emphasis on hybrid operations with non-governmental organizations and private military corporations being fully engaged, there are two observations that I would make to any UN leader with respect to UN air power:

1. The United Nations will be, at best, a coordinator, not a commander.
2. The United Nations will be most successful if it becomes the central provider of trusted unclassified intelligence (decision-support) to all of the participating agencies.

In other words, regardless of what the UN mission is, regardless of what mix of UN air power is engaged, the primordial role of the United Nations will be as a service of common concern with respect to information and intelligence, and it is that primordial role that must be first in the mind of anyone who is creating a UN air power mandate; acquiring a UN air power force structure; or devising campaign plans for the employment of UN air power.

The primary role of UN air power in the twenty-first century is to serve as the hub – a service of common concern – to hybrid networks requiring intelligence – decision-support – and responding to shared information as a harmonizing influence instead of "command and control".

The Changing Craft of Intelligence

With that background, we can now look at how the world has changed and how the intelligence field should change along with it, as shown in Table 17.4.

Old (State)	New (Hybrid)
Depend on members	Harness "World Brain"
Depend on secrets	90 per cent open source
Depend on active lies	Lies quickly exposed
Lack 90 per cent of what is needed to carry out mandate, force structure, campaign plan, and day-to-day tactics	

Table 17.4 Modern intelligence emphasis

The new model will be possible if leaders will be leaders – 90 percent of what is needed for precision peacekeeping and "peaceful preventive measures" can be obtained from open sources. The future of intelligence as decision-support is not federal, not secret, and not expensive.

A recent book, *No More Secrets: Open Source Information and the Reshaping of U.S. Intelligence*,[7] is helpful in understanding this point. I worked at the Top Secret Code word level from 1976 until 2006 and have also been a global proponent for open source intelligence for 20 years. The United Nations, and UN air power, can take from me two points on the matter of intelligence:

1. Member states do not have national or military intelligence systems suited to support hybrid networks that require unclassified, holistic intelligence.
2. Of all that a UN commander or any leader of any hybrid element working with the United Nations "needs to know", 90–95 percent is not available from a UN member state, is not secret, and can be obtained from open sources.

There are eight information-sharing groups, or "tribes", that the United Nations must engage: government, military, law enforcement, media, academia, civil society, not-for-profit organizations, and business. Within government we can distinguish between: secret internal, secret shared, and sensitive shared; and open (public) information categories. The information commons available to the United Nations is created by these eight tribes in the aggregate.

During the conference at which this chapter was first presented, Lieutenant-General (retired) Roméo Dallaire touched on the disconnect between the United Nations and everyone else, as well as the paucity of actionable intelligence (decision support) from member states. I have served in three "country teams" overseas, on multiple assignments in Washington, and did a second graduate thesis on strategic information management. I found that a typical country team collected at best 20 percent of what could have been known and, in the process of sending that back to Washington spilled 80 percent of it (for example, sending in hard copy to a single agency desk instead of disseminating electronically).[8]

Most governments make decisions based on ideology and very limited real-world information; at the same time they are terrible about sharing what they do know with the United Nations and other international or non-governmental organizations. This pathology is not limited to government. Academic, civil society, commercial – all forms of organization have real difficulty doing external information-sharing and sense-making.

This is a major reason for the United Nations to take the lead and for UN air power commanders and staff to be especially well versed in facilitating M4IS2.

Today, intelligence as a discipline is very immature. If one keeps firmly in mind the Brahimi Report, the Report of the High-Level Panel on Threats, Challenges, and Change, and the Report of the High-Level Panel on Coherence, it is possible to draw two conclusions when observing the state of intelligence (decision-support) among governments today.

1. It is obsessively focused on inter-state conflict and on secret sources and methods.
2. They have, as Norman Cousins summarizes in his book *Pathology of Power*, grown away from the public interest. This is important enough to warrant one summary and one quotation from him.

Summary

The tendency of power to drive intelligence underground; to become a theology, admitting no other gods before it; to distort and damage the traditions and institutions it was designed to protect; to create a language of its own, making other forms of communication incoherent and irrelevant; to spawn imitators, leading to volatile competition; to set the stage for its own use.

Quotation

Governments are not built to perceive large truths. Only people can perceive great truths. Governments specialize in small and intermediate truths. They have to be instructed by their people in great truths. And the particular truth in which they need to be instructed today is that new means for meeting the largest problems on earth have to be created.[9]
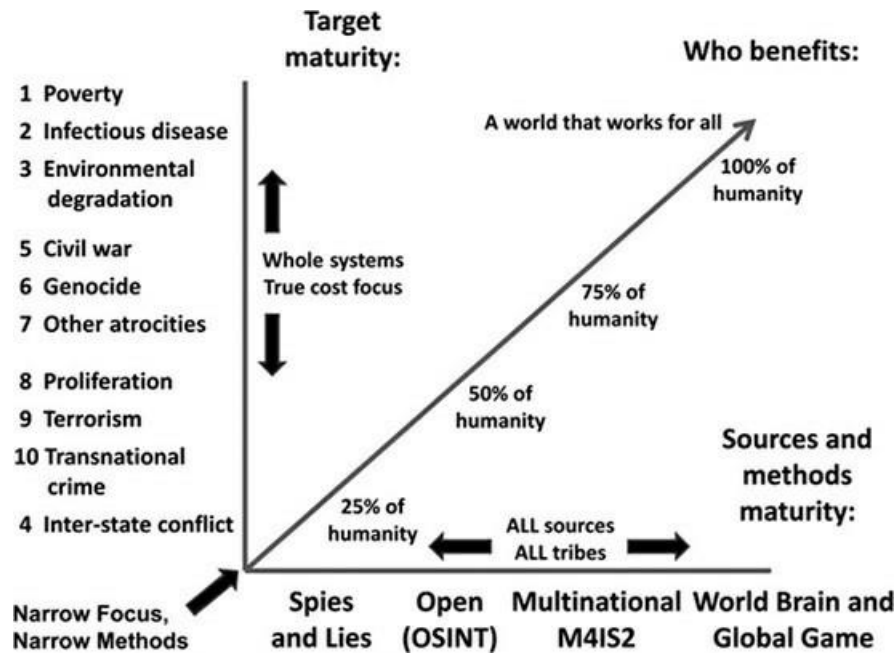
Figure 17.1 Modern intelligence
Source: The author.

In my view, the United Nations and its air power have an infinite opportunity to do well by being the global proponent for mature intelligence (decision-support), as depicted in Figure 17.1.

Opportunities Lost

Strategic Level: Iraq II

Although I and many others tried to speak the truth to the public on Iraq, our cash-up-front full-page newspaper ads in 2003 were rejected by the mainstream media. The fact is that Dick Cheney led us to war on the basis of 935 now-documented lies; and then Secretary of State Colin Powell went along with these lies when he appeared before the UN General Assembly.[10] In the future, without relying on member states, the United Nations must be able to detect lies, expose them, and make the case for peace such that imperial invasions and occupations are rejected by massive informed public opinion.

Operational Level: Haiti 2010a[11]

Haiti is another opportunity lost, one that has enormous significance for the future of UN air power. This nationwide disaster in January 2010 was converted into a catastrophe with no end by a lack of intelligence, a lack of imagination, and very poor decisions across all parties from the US Southern Command (USSOUTHCOM) to the International Committee of the Red Cross and the United Nations, among many others. The tragedy was elevated virtually into crimes against humanity by the blatant corruption visible to informed observers among the charities that collected funds, ostensibly for Haiti, yet delivered from 1 percent to 10 percent with the average being closer to 2 percent, in the months thereafter. Presented to any court, the facts would have led to convictions for misrepresentation, fraud, and failure to perform as promised. Haiti was an intelligence and an imagination failure, with an air–sea lift management failure.

Haiti was an intelligence–imagination failure. Despite the fact that there was an obvious and desperate need for an orchestrated delivery of water, food, and lightweight shelter materials, the best the USSOUTHCOM could do was send in 20,000 troops with their own high-end logistics needs in the aftermath of the disaster.

USSOUTHCOM also refused to heed the many warnings about the impending rainy season (approximately June to October), and did nothing to address the urgent need for both sanitation facilities across the country, and lightweight housing options, among which I recommended light nested plastic geodesic domes.

USSOUTHCOM, regional authorities and the United Nations, including MINUSTAH already located in Haiti, failed to imagine how easily a regional sea–air management plan could be put into place, diverting large air and sea vehicles to major air and sea ports (for example, in Santo Domingo, Guantanamo, Havana, Miami, Tampa and Dover Air Force Base or Caracas), for breakdown and reshipment to the small air and sea ports still working in Haiti.

Put quite simply, the United Nations, the United States, and others remained in the unilateral action mindset, failing to see the advantages of a regional concept of operations and the necessity of orchestrating all incoming materiel and the craft it traveled on via a robust regional sea–air management plan. MINUSTAH was neither staffed nor of the mindset to orchestrate a regional assistance campaign. What would have been of enormous assistance are two inter-twined capabilities. First, an air-mobile M4IS2 element able to operate from in country, from a fixed base with global communications, and across a distributed network of professionals intimately familiar with all of the logistics categories, all of the participating elements (most of them non-governmental). Second, all of the associated communications – computing, intelligence, and information equipment, frequencies, and analytic protocols corresponding to a global diversity of well-intentioned but "out of control" parties. This is harder than it might appear.

At the strategic and technical levels, it could have been realized that the best way to migrate over a million people away from Port-au-Prince would have been to deliver building materials, sanitation kits, water, and food to the other five small ports in Haiti, via landing craft loaded out of Guantanamo, Havana, and Santo Domingo.

At the strategic and technical levels, it could have been realized that creating several factories to manufacture sanitation, plastic geodesic domes, and other mid-term sustainability packages, would employ people and accelerate the general recovery, with a special focus on having two million people under leak-proof plastic with reliable sanitation before summer rains came (an obvious and known future turn of events).

At the strategic and technical levels, it could have been realized that at least 100 Mobile Army Surgical Hospitals (MASH) were needed. In so many ways, Haiti was and remains a lost opportunity to save and resurrect an entire country through the orchestrated, imaginative infusion of assistance with a coherence that the United Nations is striving to achieve, but cannot – absent the concepts in this chapter.

Technical: Earthquakes, Nuclear Plants, and Tsunamis

I believe the United Nations, because it is not trained, equipped, or organized to "do" global intelligence or "intelligence from above", has been a failure at encouraging proper planning across nuclear and other energy options, and also unable to prevent or retroactively punish covert attacks on nuclear capabilities.

Nuclear power needs to be safe, and it needs to be developed in conjunction with a proper understanding of the true cost over the full life cycle of all possible sources of energy. The fact is that most nuclear plants are at sea level, and are not only subject to flooding from tsunamis (near term) and global warming (longer term) but are also subject to being closed down by jellyfish. Add to that the very broad range of earthquakes known to be imminent in the next decade, and one can only conclude that if the United Nations does not become a global facilitator for information-sharing and sense-making, it will become even less relevant to the future of humanity than it is now.

In each of the above cases – strategic, operational, tactical, and technical – the role of UN air power will be central. It will be the kinetic counterpart to UN global information and intelligence operations, linked to "information peacekeeping", a term I coined in early 1997 for the United States Institute of Peace, and then developed further for a book edited by my colleagues Doug Dearth and Alan Campen.[12]

In the balance of this chapter, I will present my view of how UN intelligence and UN air power must develop together. I will present five ideas for UN intelligence and seven ideas for UN air power. Intelligence without air power is irrelevant – air power without intelligence is noise. They need each other.

UN Intelligence – Non-kinetic Peace from Above

Despite some significant progress during the tenure of Major- General Patrick Cammaert, The Royal Netherlands Navy, as Military Advisor to the Secretary-General, and the proven success of Joint Military Analysis centres (JMACs) and Joint Operations centres (JOCs), today the United Nations remains largely incapable of producing coherent intelligence (decision support) across all of its needs, inclusive of the specialized agencies. The world can, essentially, be divided into eight tribes, illustrated in Figure 17.2. They currently operate far too much in isolation.

Figure 17.2 The UN and eight tribes of information– intelligence
Source: The author.

This figure was created during my teaching of a six-agency UN class in Beirut in August 2007, a three-day orientation on "Information Sharing & Analytics".[13] We called it the "Class Before One". Although some excellent multinational information-sharing and intelligence courses are run, notably in the Nordic countries, the United Nations does not yet have a proper organization with standards for intelligence, and such analysts as exist are scattered and too easily corrupted by their supervisors with departmental or agency agendas.

In relation to what can be known, the United Nations is severely ignorant on all fronts.

Harmonized Coherence from Shared Information

Over the next decade I anticipate that the United Nations and various governments will have less money to spend and will achieve their good effects through shared information and multinational intelligence (decision-support). The United Nations cannot control or coordinate its own specialized agencies with any degree of coherence today, in part for lack of authority and in part for lack of the informal authority that a UN intelligence organization would provide.

Coherent integrated intelligence is how the United Nations can influence and lead through shared and generally unclassified or open-source intelligence.

UN Intelligence Must Be Multilevel in Nature

I learned a great deal from Lieutenant-General Roméo Dallaire and Major General Patrick Cammaert. The particular lesson I want to emphasize here is that the United Nations must be able to "do" intelligence (decision-support) at all four levels of thought: strategic, operational, tactical, and technical; it must be able to do integrated intelligence among the civil, military, and environmental domains; and finally, it must be able to do integrated intelligence and counterintelligence across all of the different mission and logistics areas – it does no good to deliver cans without can openers, or food and shelter without sanitation. Holistic intelligence is both an art and a science, something the United Nations desperately needs to learn; a model of this is shown in Figure 17.3.

It is far beyond the limits of this short chapter to introduce the concept of "true cost" in detail, but as others have documented, at least 50 percent and often as much as 70 percent of all "costs" (upon which profits are calculated) are either waste, or corruption, or both. This has been documented across the policy areas and is especially relevant to areas of deep concern to the United Nations and human security: education, energy, family, health, and justice.
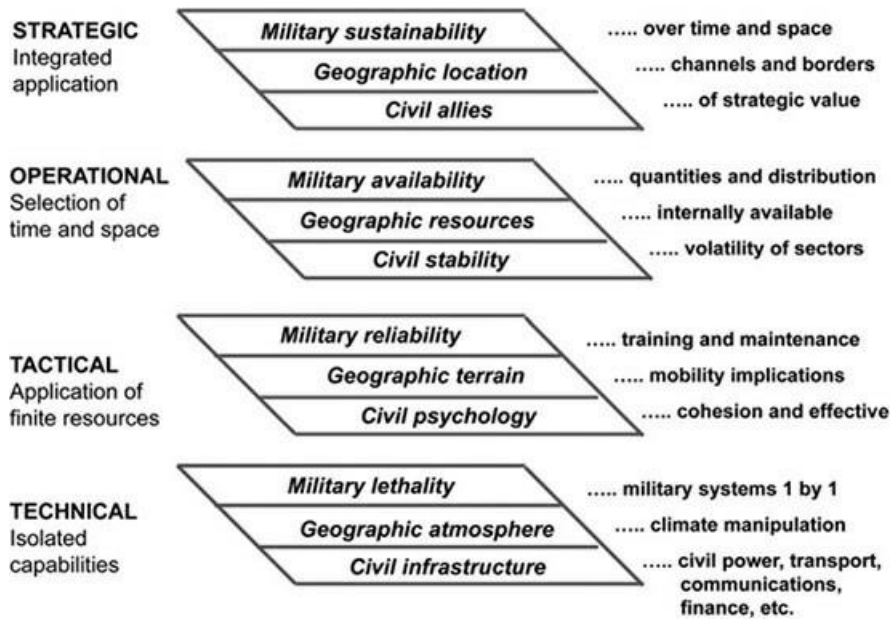
Figure 17.3 Integrated multilevel intelligence model
Source: The author.

On the following page, in Table 17.5, is the depiction of what it means when we get a grip on "true costs" and are able to eradicate waste and corruption – we can achieve a prosperous world at peace for one-third the cost of what we spend now on war alone. Add to that savings from eliminating waste across education, energy, health, and justice, and we achieve heaven on earth.

Table 17.5 is based totally on the brilliant lifelong work of Professor Medard Gabel, number two to Buckminster Fuller in the creation of the analog World Game, and today the developer of the EarthGame™ with integrated "true cost" information.[14]

The United Nations must free itself from the monopoly of judgment within the Security Council, whose permanent members are the worst proliferators and practitioners of war, and must instead leverage public intelligence (decision-support) and hybrid networks of activists, to achieve both public diplomacy within the donor states, and coherence or unity of effort as delivered to the beneficiary states. It should do this by becoming a global public intelligence network, one that I have suggested should be called the "United Nations Open Source Decision-Support Information Network (UNODIN)".

Total world military expenditures	US$1.3 trillion
versus	US$ billion
Eliminate starvation and malnutrition	20
Clean water for all	12
Health care for all	25
Shelter for all	21
End illiteracy/education for all	10
Clean safe energy for all	45
Save the environment	32
Democracy and diversity	5
Secure world for all	17
Retire debt/credit for all	30
Stabilize population everywhere	11
Total prosperity and peace for all	228

Table 17.5 Cost of war versus cost of prosperity and peace for all (annual expenditures)

UN Strategy – Peace from Above with Intelligence and Air Power

Over a decade ago when I starting thinking about the United Nations, peace, and the role of a mature intelligence professional in fostering peace, I created the graphic in Figure 17.4 opposite. It is implementable today.

All of this has been a necessary preamble – a context and a foundation – for where I believe UN air power must evolve in the twenty-first century. If intelligence (decision-support) is the non-kinetic foundation for UN relevance and effectiveness in the twenty-first century, then air power is the kinetic foundation. UN air power will deliver precision peace from above.

UN Air Power – Kinetic Peace from Above

I have been a critic since 1988 of how the US government makes decisions, focusing my concerns on the areas that I know best: secret intelligence and defense policy, acquisition, and operations. Watching the US government make a complete mess of Haiti was a deeply troubling experience for me.

Member states and their secret intelligence communities are ignorant. They lack intelligence (decision-support) and they lack integrity in the holistic sense of the word. The United Nations is no better, but the United Nations has an opportunity that I present, centered on air power, in seven steps:

Intelligence-Driven Precision Peace Targets, Space, Cyber, Air

LOVE NOT WAR
Gandhi had it right

APPLY THE GOLDEN RULE
We cannot win with guns

BE ACCOUNTABLE TO ALL
Citizens, Congress, humanity

INTEGRATE FAITH AND VALUES
Morality, legitimacy, reciprocity, transparency

DEVISE AND IMPLEMENT LONG-TERM
Multinational information-sharing and sense-making

APPLY OPEN EVERYTHING WITH INTEGRITY
Combine access, brains, honor and tools

START WITH REALITY
All information, all languages, all the time

Aerospace Power (Eyes, Sharing, Sense-making, Precision air delivery)

Figure 17.4 UN strategy 21: Intelligence-driven precision peace
Source: The author.

Step 1: Peace Jumpers

Here is an image of what I call a "Peace Jumper". Peace Jumpers, like smokejumpers (who parachute into remote areas to fight wildfires), jump into the fire, but with one big difference. Peace Jumpers are armed with man-portable communications and instant access to real-time translations in all languages. The Peace Jumper program would have the following elements:

1. It would be globally celebrated and exercised regularly, with tangible deliveries to demonstrate to every public in every clime and place that when Peace Jumpers land, they bring with them Peace from Above.
2. Peace Jumpers would be a multinational force, especially trained, a form of "Special Forces for Peace" drawn from the best volunteers of all nations. They would be qualified to speak the language(s) of their region generally, but have instant access to real-time translation across 183 languages and dialects as needed.
3. Peace Jumpers would be on "strip alert" status in each major region (for example, in Africa there would be a cadre each for North, West, East, and South Africa). When a need occurs, as many as 100 Peace Jumpers could be spread across the area of concern, and begin immediately calling in "Peace Targets", a form of Reverse Time-phased Force Deployment Data.

Step 2: Precision-guided Cargo Parachutes

I skip ahead to precision-guided cargo parachutes (between the parachutes and the Peace Jumpers are Steps Three, Four, and Five) because this is the essence of Peace from Above, and the tangible "deliverable".

There are some very exciting developments in precision airdrops and, while provision must be made for recovering the guidance units this is in my view the single greatest advance in the possibilities of Peace from Above when combined with Peace Jumpers, regional Air–Sea Management, and a Multinational Decision-Support Centre.[15] Flocking of sets of parachutes, active collision avoidance, and multiple locations hit accurately with one string of parachutes, each to a separate village – these are all possible today.

What is not available to the United Nations today is 1:50,000 combat charts for the 90 percent of the world where the United Nations and coalition forces go in harm's way – the Russian government has many of these and could be part of the solution.

Step 3: 1:50,000 Combat Charts and Air Intelligence

The aviation piloting standard for charts is 1:250,000. This is inadequate for close air support, and the coordination of fire support, and also for coordinating complex ground activities by a very wide range of non-governmental actors.

I helped General Cammaert when he was UN Force Commander in the eastern Congo, as part of the UN Stabilization Mission in the Democratic Republic of Congo (MONUSCO), His priorities were for 1:50,000 combat charts, which did not exist at the time. They were eventually created by the Dutch. Laptops do not work with bullet holes in them. I want the world at 1:50,000 on the shelf ready to go.

A very important point was made during the conference by Professor Robert Owen of Embry–Riddle Aeronautical University; bandwidth is more expensive than pilots. I believe the US model of many unmanned aerial vehicles is bad at multiple levels from cost to processing speed to flexibility. Pilots will be the heart of UN air power. Not only will air power be central to all operations but it may often be the major force employed to define and deliver Peace from Above.

Step 4: Regional Multinational Intelligence Centers

Now we come to the centerpiece of the UN intelligence and UN air power mosaic. As we saw with respect to Haiti, the US government, and USSOUTHCOM in particular, disgraced themselves. The Joint Intelligence Center of USSOUTHCOM was totally without value, without imagination, and without effect. This is what happens when intelligence

"professionals" are not held accountable for actually being able to collect, process, analyze, and deliver decision-support as an outcome. The US military is on the verge of a 50 percent cut to its global budget. In my view, the world has relied for much too long on US military support, at the same time that the world has been much too tolerant of unilateral militarism and unwarranted extra-legal interventions by US covert and overt forces. My antidote to US irresponsibility is to create multinational, multiagency, regional intelligence centers designed for Asia and regions of the world, each with their own staff.

In both the United Nations and its member states, it has long been recognized that intelligence focused on a single country is not adequate. From blood diamonds going out to mercenaries and proliferation precursors coming in, only a regional, multinational, multiagency information-sharing and sense-making network stands any prospect of being effective. The United Nations *can* lead.

Step 5: Liberation Technology and Satellites for Peace

The final two elements of UN intelligence and UN air power are both centered on harnessing the distributed intelligence of the Earth's populations, and empowering them with the tools to communicate their needs both to the United Nations and to hybrid networks of individuals and organizations seeking to render assistance; and with those tools to create infinite wealth. I refer here to the three billion extremely poor people for whom access to the Internet should be, as the United Nations recently declared, a human right.[16]

In the twenty-first century, UN peacekeeping and conflict prevention will be centered on discerning and sharing the truth more than on deploying armed forces. The greatest source of information about conditions of instability and preconditions of revolution for the United Nations will be the public, not member states.

I am not happy with the "shadow Internet" the US government claims to be building. I believe it will be underfunded and generally out of touch with what is already available in the way of solar-powered Internet hubs, wireless mesh, and adapters that turn any cell phone into a satellite phone. Free satellite and airborne relay stations should, in my view, be a big part of UN air power. Cheap adapters already exists (US$169). For instance, the SPOT app can connect your smartphone to communication satellites to update social media, send short emails or text messages or send your global positioning system coordinates and emergency messages. When combined with free satellite time subsidized by the hybrid network seeking to gain the information advantage for peace, this turns any citizen into a priceless information source with the added advantage that they are less likely to be detected by those who mean them harm in this era of mass surveillance, especially if they are using throw-away cell phones.

It is important to emphasize that the multiplicity of sources will only be as valuable as the social network that filters and validates the traffic, and the back office machine and human processing that can be applied by a multinational regional intelligence center or an overhead UN air coordination and collaboration aircraft.

Related initiatives in this area can be found by using the terms "Liberation Technology", "Autonomous Internet", "Mesh Network", and "Invisible Communications". When the Egyptian government of Hosni Mubarak cut off the Internet in 2001, its action accelerated global public interest in achieving complete independence from any government or corporation that might wish to interfere with public communications.

Conclusion

Over half the ports of the world are inadequate for sealift due to shallow waters, limited turning radiuses for gray- and black-bottomships,[17] and poor port and supply-line development. Even if goods can be offloaded, the probability of their being spoiled or stolen before reaching their furthest destination is very high. However, all countries of the world can be serviced by C-130 aircraft, and the beauty of precision parachute operations is that it can provide precision deliveries to the most remote villages, in a manner that is fully transparent and almost devoid of corruption and theft possibilities. This is the "UN intelligence – UN air power advantage". Informed air operations. Precision assistance. The rendering of UN assistance in a coherent fashion – deliver as one – and the influencing of all others (governmental and nongovernmental) so as to mobilize, channel, and leverage a thousand times more value than could possibly be donated to the specialized agencies or delivered by the United Nations acting alone.

UN intelligence – UN air power can lead the way toward a prosperous world at peace where peaceful preventive measures are identified quickly and acted on quickly, at very low costs in comparison to all alternatives.

Since most charities, including the Red Cross, deliver less than 20 percent of the total funds collected – some as little as 10 percent, and one, the Bono Foundation, only 1 percent, – this is a major opportunity for the United Nations to use UN intelligence to capture funding that can be placed in direct action with a perfect accountability trail. It can – it should – change the future of global assistance, of conflict prevention, and of peacekeeping.

Put directly, I anticipate the day when the United Nations no longer relies on member state funding; comprises representative parliaments from all eight tribes of information–intelligence (academic, civil society, commerce, government, law enforcement, media, military, and nongovernmental); and influences over US$1 trillion a year in planned giving and planned assistance, much of it real-time or near-real time in nature. *To do that, UN intelligence and UN air power will have to evolve in spectacularly innovative, effective, and world-changing ways.*

take a moment to single them out, for each has in their own way changed my life, my focus with respect to the potential of the United Nations and, hence, with respect to the future of humanity.

In rank order, for lack of a better rationale for sorting, they are:

Madame Louise Frechette, Deputy-Director-General of the United Nations and former Deputy Minister of Defence for Canada. For seeing the shortfalls in decision-support at the strategic level, and seeking to remedy them.

Lieutenant-General Roméo Dallaire, Force Commander in Rwanda, for his heroic and personally costly sacrifice in illuminating the complete disconnect between UN Headquarters and reality, a disconnect that is by itself a crime against humanity not to be tolerated anymore.

Brigadier-General James Cox, Deputy N-2 for NATO, who single-handedly led the leadership toward an appreciation of OSINT and directed the preparation of the *NATO Open Source Intelligence Handbook* and the *NATO Open Source Intelligence Reader*, still standards in the field but overdue for updating and expansion. He personally inspired OSINT units across the 66 member countries at the time of NATO and the Partnership for Peace (PfP).

Dr A. Walter Dorn, Consultant to the United Nations, author, and investigative academic, has been the foremost observer and reporter on UN intelligence from its brilliant days in the 1960s in the Congo to its lesser decades; and now as it has evolved in the 1990s. It is not possible to reflect knowledgeably on UN intelligence without first consulting all that he has written and asking about all that he plans to write.

Lieutenant Commander Andrew Chester, then serving in the Intelligence Division of Supreme Allied Commander, Atlantic, personally led my efforts in drafting the *NATO Open Source Intelligence Handbook*, and collating materials from my long-running conference for the *NATO Open Source Intelligence Reader*, and himself drafted a quite extraordinary and still enormously popular *NATO Guide to Intelligence Exploitation of the Internet*.

Endnotes

[1] *Editor's note*: Cases of a decisive and deliberate impact of air power in UN peace operations include: the Congo in the 1960s (see Chapter 2) and the Congo in the 2000s (Chapter 14).

[2] A good summary specifically in relation to the United Nations and the North Atlantic Treaty Organization (NATO) air operations is provided by Andrew Cockburn. Additional commentary is provided by Chuck Spinney, long-time critic of US military acquisition policies. See, respectively, Cockburn, A. "The Limits of Air Power", *Los Angeles Times*, 3 April 2011. Available at: http://articles.latimes.com/2011/apr/03/opinion/la-oecockburn-libya-20110403 [accessed 7 May 2014]. Spinney, C. "The Limits of Air Power", *Journal of Public Intelligence*, 2011.

[3] The concept of using open source intelligence to identify needed "peaceful preventive measures" was first brought forward by General Al Gray, US Marine Corps (then Commandant of the US Marine Corps). See Gray, A.M. "Global Intelligence Challenges for the 1990s", *American Intelligence Journal* 11(1) (1989).

[4] The full term is "Multinational, Multiagency, Multidisciplinary, Multi-domain Information-Sharing and Sense-Making". Originally a Swedish and then a Nordic military concept, (M4IS2) has been adapted to be central to the concept of public and collective intelligence as oriented toward creating a prosperous world at peace.

[5] Cross-decking is a standard UN/military term for moving people or materiel from one deck (air, sea, land) to another (air, sea, land). It is a logistics operation that needs planning. Big air refers to C-17's and Boeing 777's and other aircraft that require major (long) runways. Small air refers to C-130's and localized smaller civilian aircraft that can land in out of the way smaller airports.

[6] See, respectively, "The Secretary-General's High-level Panel Report on System-wide Coherence: 'Delivering as One'", UN Doc. A/61/583 (2006); "The Secretary-General's High-level Panel Report on Threats, Challenges and Change: 'A More Secure World – Our Shared Responsibility'", UN Doc. A/59/565 (2004). "The Secretary-General's High-level Panel Report on United Nations Peace Operations" ['The Brahimi Report'], UN Doc. A/55/305–S/2000/809 (2000).

[7] Bean, H. *No More Secrets: Open Source Information and the Reshaping of U.S. Intelligence*. Praeger Security International (Santa Barbara: Praeger, 2011).

[8] Hard copy material sent from one Embassy section back to their corresponding desk officer is generally thrown in the trash or filed; it is rarely "exploited" as in digitized, evaluated, distilled, or shared outside the receiving section of a single agency.

[9] Cousins, N. *The Pathology of Power* (New York: W.W. Norton & Company Inc., 1987).

[10] For more information, see Rampton, S. and Stauber, J. *Weapons of Mass Deception: The Uses of Propaganda in Bush's War on Iraq* (Tarcher/Penguin, 2003).

[11] *Editor's note*: For an alternate interpretation of US relief operations in Haiti in 2010, see Chapter 5 of this volume.

[12] Steele, R.D. "Information Peacekeeping: The Purest Form of War", in *Cyberwar 2.0: Myths, Mysteries and Reality*, ed. Alan D. Campen and Douglas H. Dearth (Fairfax: AFCEA International Press, 1998). Available at: http://www.fas.org/irp/eprint/cyberwar-chapter.htm [accessed 29 April 2013]; S Avoidance and Resolution Through Information Peacekeeping", *Journal of Conflict Studies* 19(1) (1999). Available at: http://journals.hil.unb.ca/index.php/JCS/article/view/4380 [accessed 29 April 2013].teele, R.D. "Virtual Intelligence: Conflict

[13] The slides with words in notes format can be found at http://tinyurl.com/UN-Class-1 [accessed 24 April 2014].

[14] I recommend Professor Gabel's book, Gabel, M. *Designing a World That Works for All: How the Youth of the World are Creating Real-World Solutions for the UN Millennium Development Goals and Beyond* (Create Space Independent Publishing Platform, 2010).

[15] An "Air–Sea Management and Multinational Decision-Support Centre" is not a JMAC. The first is focused on coordinating information shared across the full spectrum of participants in hybrid networks and combines logistics optimization with intelligence support to non-UN elements as well as UN elements. The JMAC is primarily a UN-centric peacekeeping operations capability.

[16] Report of the UN Special Rapporteur on the Promotion and Protection to the Right to Freedom of Opinion and Expression, UN Doc. A/66/290, 10 August 2011.

[17] Gray-bottom ships are military ships. Black-bottomships are merchant ships. These are standard terms of art.