

Overcoming Helicopter Force Generation Challenges for UN Peacekeeping Operations

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UN peacekeeping missions are increasingly mandated to take on a range of complex tasks. Due to the dynamic, demanding, logistically challenging and time-sensitive nature of these operations, missions have become increasingly dependent on helicopters to effectively implement their mandates. Yet UN peacekeeping missions face a critical shortage of military helicopters. Resolution of the force generation challenges for helicopters requires a multifaceted strategy that addresses deficiencies in overall supply, clarifies administrative and procedural ambiguities, including tasking and command and control, and revisits reimbursement rates for member states.

This article examines the major issues affecting the provision of helicopter forces for UN peacekeeping missions that are increasingly mandated to take on a range of complex tasks, from supporting elections and protecting civilians, to extending state authority and deterring spoilers. Missions require a high level of flexibility, mobility and rapid response. Due to the dynamic, demanding and urgent nature of these operations, as well as their often geographically and logistically challenging environments, missions have become increasingly dependent on helicopters to implement their mandates. The UN Mission in Côte d'Ivoire (UNOCI) demonstrated this in early 2011 during a post-election crisis when it relied on military attack helicopters to defeat the heavily armed forces of former president Laurent Gbagbo. Helicopters have played a vital, multifaceted role: inserting and extracting troops, providing armed escorts, allowing for immediate reaction to situations, facilitating shows of force, monitoring and surveillance, search and rescue, medical and casualty evacuation, logistics support and communications. Military attack helicopters have also been deployed for deterrent effect and to provide tactical and operational support in hostile situations as in eastern Congo.

Yet UN missions face a critical shortage of military helicopters. According to force requirement planning, the UN anticipated a shortfall of 56 out of a total of 137 required by April 2011 – a gap of over 40 per cent, consisting predominantly of a shortage in military utility helicopters.¹ The lack of these assets can have negative effects on all operations, but most significantly hinder missions such as the AU (African Union)–UN Hybrid Mission in Darfur (UNAMID), which in March 2011 had only five helicopters out of the 24 required, and the UN Organization Stabilization Mission in the Democratic Republic of Congo (MONUSCO), which had 18 out of 29 required in the same month.² Due to

the size of the area of operations relative to troop numbers, the extremely limited road networks and other transport infrastructure, and the inclement weather conditions, these missions rely heavily on helicopters for troop deployments, patrols, logistics and other tasks vital to the operational and general support functions of the mission.

This article examines the major issues affecting helicopter force generation: helicopter supply; UN policies on command and control; operational 'tasking' (the assigning of operational responsibilities); administrative procedures and safety standards; and procurement and reimbursement systems. It focuses predominantly on force generation issues for military utility helicopters (MUHs), which represent 34 per cent of total helicopters in missions as of February 2011, rather than attack helicopters, which comprise just 6 per cent. Commercially contracted utility helicopters account for the remaining 60 per cent.³ Although civilian contracted helicopters undertake some logistical mission tasks, their operational capacities are limited by International Civilian Aviation Organization (ICAO) standards. The majority of challenges facing extant and potential troop-contributing countries (TCCs) relate to MUHs. Nonetheless, many of the same challenges are magnified when applied to military attack helicopters.

To assess the motivations and concerns of current and potential helicopter-contributing countries, the authors conducted interviews with UN officials and military representatives at the permanent missions of current, past and potential helicopter providers to UN operations, as well as military representatives at permanent missions of countries deploying helicopters through NATO and the EU.

The first section of this article examines the motivations and constraints affecting countries contributing helicopters to UN missions. The next section focuses on operational challenges for current helicopter-contributing countries, including command and control. The article then describes a number of administrative, procedural and financial challenges of concern to TCCs, in particular guaranteeing a minimum reimbursement for flying hours. The last section suggests other possible options for overcoming force generation challenges, including reviewing existing concepts of operation and force requirements, identifying alternatives to helicopters, bilateral sponsorship of refurbishment and pilot training, hybrid operations and inter-mission sharing of helicopters.

The article contends that resolving the challenges for mobilizing helicopters for UN peacekeeping requires a multifaceted strategy to address deficiencies in overall supply, clarifying administrative and procedural ambiguities at UN headquarters and in the field. In the short term, the best option may be to utilize civilian contracted aircraft to fill gaps. Yet, they come at higher financial cost and offer less operational flexibility than MUHs. Ultimately, broadening the base of contributing countries, however challenging, should remain a priority.

Motivations and Constraints for Helicopter-contributing Countries

According to most military advisers interviewed, the overarching motivation to participate in UN peacekeeping operations is a desire to support the 'international

community's' efforts to maintain peace and security. Yet, other key motivating factors for TCCs reflect their national interests and capabilities. These considerations determine the nature of their participation, particularly which peacekeeping missions to support. Several factors were cited by TCCs as influencing their deployment of helicopters to UN missions.⁴ While TCCs emphasize the protection of military and civilian UN personnel as a pivotal factor, the decision of where to deploy helicopters is largely driven by the desire to provide additional protection and logistical capability to national contingents already in the mission area or, in more limited cases, to support a force commander. Of the 13 current providers of helicopters to UN peacekeeping operations (see Table 1), nine are among the top 20 troop contributors.⁵

Geopolitical reasons were also cited in determining where to deploy helicopter assets. Many TCCs are generally more willing to deploy in areas where they have a pre-existing relationship with the host country and prefer operations with closer geographical proximity over those theatres located further away – for example, Argentinean and Uruguayan deployments in Haiti. This is mainly due to a perceived 'area of interest', though in some cases the high cost of shipping helicopters for routine maintenance is a factor. Potential TCCs expressed similar reasoning in discussing prospective deployments.

Many TCCs, such as Chile and Argentina, have few military pilots and see deployment to UN peacekeeping operations as an opportunity to enhance their pilots' flight training – what one contributing country referred to as 'schooling missions'. Among the benefits of deployment to a UN operation are pilots' exposure to operating in diverse terrain, weather conditions and conflict types; the opportunity to fly under international command, which among other skills enhances the 'aeronautical' English-language ability of the crew; and a general

TABLE 1
HELICOPTER PROVIDERS (FEB. 2011)

Country	Utility	Attack ¹	Total
Commercial	111	0	111
India ²	10	4	14
Ukraine	8	3	11
Bangladesh	9	0	9
Russia	8	0	8
Pakistan	6	0	6
Argentina	5	0	5
Ethiopia	0	5	5
Chile	4	0	4
Italy	4	0	4
Ghana	3	0	3
South Africa	2	0	2
Spain	2	0	2
Uruguay	2	0	2
Total	174	12	186

Source: DFS.

¹ Attack helicopters are authorized for MONUSCO, UNAMID, UNOCI and UNMIL.

² India did not renew its LoA and is in the process of repatriating its MUHs.

increase in pilot training, as pilots are able to log more hours than the TCC might otherwise be able to afford in national training exercises.

Much of the international debate and attention related to addressing helicopter shortfalls has focused on generating helicopters from Western countries, which have large inventories of helicopters and pilots relative to the majority of UN member states. It is important to note, however, that some of the main motivating factors for existing and potential contributing countries to UN operations may not align with Western militaries' priorities. Since Western countries are less prevalent in UN-commanded peacekeeping operations, there is little incentive for them to deploy rotary-wing assets to support national contingents. Likewise, there is less motivation for these countries to use UN peacekeeping operations to support experiential training for their national forces. Interviews revealed several key constraints that limit the potential supply of helicopter assets for UN operations. NATO and EU countries, while possessing a greater inventory of helicopters, stress that their ability to deploy to UN missions is limited by their engagement in other multilateral operations, particularly Afghanistan, and speak of a general overstretch of their assets.⁶ Recent or aspiring NATO members are likewise affected, as they provide helicopters to demonstrate a commitment or value to the alliance. Many of these countries, including the UK and France, also state that operations led by NATO or the EU had priority over UN peacekeeping missions. Several European countries currently provide utility helicopters to the UN Interim Force in Lebanon (UNMIL), which in UN missions has been an exception in terms of command and control arrangements and nationality of force commanders.⁷ By contrast, the majority of non-NATO/EU TCCs have a limited availability of helicopters in their national forces and underline the need to preserve assets for domestic purposes, for example, search and rescue and disaster relief. For a few countries, such as India, the fact that helicopters were deployed to UN operations in the DRC when a domestic need emerged has raised political issues that led, in mid-2011, to redeployment back home to combat a Maoist rebellion.⁸

The gap in force requirements is higher in missions with adverse topographic or weather conditions (such as dust storms), which impose greater wear and tear on helicopters and necessitate more frequent maintenance and refurbishment. Such requirements result in higher short- and long-term costs for TCCs. While not itself a deterrent to the provision of helicopters, the impact of climatic conditions on helicopters has been exacerbated by the UN's failure to provide, or delay in providing, hangars and shelter. Depending on the degree to which helicopters are outfitted with, or reliant upon, high-tech avionics, some models are at greater risk than others.⁹

Thirteen countries currently provide all military utility and attack helicopters to the UN (see Table 1).¹⁰ A majority of UN members do not have sufficient helicopters to cover domestic needs let alone to deploy them abroad. Even top providers have come under domestic pressure for redeployment from the UN to meet domestic requirements.¹¹ Yet the UN requires a fleet sufficient to rotate out helicopters for maintenance without a gap in deployment. The gap in UN force requirements most commonly refers to the quantity rather than type of

helicopters – yet they are not all interchangeable. Whether a helicopter is light, medium or heavy utility; is armed or unarmed; or has hot-weather or high-altitude capabilities, will determine how it can be used in an operation.

The capital cost of helicopters and the investment in pilot education and training also affect decisions by current and potential helicopter providers. Helicopters with advanced avionics, weapons systems and performance capabilities are more expensive to procure, require costly and frequent maintenance and require additional pilot training. They have capabilities in excess of most operational requirements and may be less suited for certain climates. Based on operations in Afghanistan, Iraq and elsewhere, EU and NATO countries have acknowledged the ‘requirement for lower cost helicopters which are single function troop air-taxis, which have a logistical resupply capability’ to meet operational requirements in such mission environments.¹² Smaller TCCs are also concerned that the national pool from which to draw pilots with the necessary qualifications, training and experience for UN missions is limited, constraining their ability to contribute to missions, especially in more challenging environments. The limited availability of qualified pilots, for example from Latin American countries deployed in Haiti, also means that those deployed undertake frequent tours of duty, raising concerns about sustainability and their losing touch with the national military.¹³

Operational Challenges and Possible Solutions

Command and control of military utility helicopters in a peacekeeping mission is a major concern among Western countries because authority for command, control and tasking of MUHs is vested in the civilian rather than military component of the mission. In the view of these TCCs, such as Canada, the absence of complete military command and control over these assets limits operational flexibility and adversely affects tasking and, by extension, usage rates and reimbursement. Some TCCs also regard the existing joint civilian–military tasking procedure (see below) as cumbersome and bureaucratic, resulting in slow response rates, particularly during a crisis when timeliness of support operations may be critical. Nonetheless, among the leading providers of helicopters to the UN, most – such as India and Pakistan – noted no or little issue with existing command and control structures.

Under UN tasking procedure, both military attack and utility aircraft, provided through letters of assist (LoA), and commercially contracted aircraft operate under the overall authority of the head of mission (typically the special representative of the Secretary-General). The head of military component, the force commander (FC), has delegated authority from the head of mission to task attack helicopters.¹⁴ The director of mission support (DMS), a civilian, has authority delegated from the head of mission for administrative and financial management of mission assets, including use of MUHs. This is exercised through a joint uniformed/civilian Integrated Support Service (ISS) or Mission Air Operations Centre, the chief of which provides management supervision, exercises tasking authority and assigns resources to priority operational requirements.

The FC exercises 'UN operational control' over military aviation units, while 'tactical control' is exercised by the respective unit commanders.¹⁵ The FC is provided on a monthly basis with a written allotment of utility helicopter flying hours over which he or she has direct control to support requirements such as operational movement of reserves, reinforcements and emergency medical evacuation.

In the view of many current and potential helicopter providers, the definition of 'operational control' is ambiguous and, with respect to the tasking procedure, open to interpretation. It has previously been observed that 'the personality of DMS, FC and their subordinate staff is an important factor in whether current regulations are interpreted in a restrictive or liberal way'.¹⁶ This has created an impression that the military component of the mission needs to be on side with the civilian component in order to get flying time allocated for military operations. Clearer direction and guidance from the UN has been recommended by the Department of Peacekeeping Operations (DPKO's) Office of Military Affairs (OMA), which acknowledges that the current UN command and control regime is ambiguous and open to interpretation.¹⁷

Member states diverge on how to resolve the issue of tasking authority. Some TCCs, for example Canada, argue that the FC should have full tasking authority for MUHs, as is the case for military attack helicopters. Other TCCs, including the US, as well as current and former UN staff in the Department of Field Support (DFS) and OMA argue that the current joint civilian–military tasking system is sufficiently flexible and responsive, and that maintaining integrated command over all utility aircraft is necessary for effective use. Those countries taking the middle ground, for example Ukraine, argue for maintaining the joint civilian–military tasking system, but with modifications to reduce the time needed for decision-making. One approach, used in MONUSCO, has been to delegate authority to the regional air operations officer so that decisions are taken locally rather than having to refer to the command in Kinshasa. Another option is to determine specific circumstances under which to delegate authority to the FC to take temporary, but full, operational control over certain assets. Standards in procedure would reduce the time spent on decision-making processes. For example, if an MUH is tasked for a civilian operation and is suddenly needed for an urgent military task, then the civilian flight could be cancelled in the light of the tempo of military operations.

Reliance on helicopters in peacekeeping operations has arguably outpaced understanding within the UN of how to effectively use air assets without diminishing safety.¹⁸ In both field missions and at UN Headquarters (UNHQ), there are insufficient personnel with expertise in planning, integrating and tasking military aviation in the context of broader military operations, and weak structures for effective oversight and day-to-day management of air assets.¹⁹ This could be addressed through recruitment of experienced aviation planners or sufficiently experienced military aviators, though this would require willingness on the part of member states to release such experts. Ukraine suggested that TCCs providing helicopters to a peacekeeping operation should also second an aviation planning officer to the mission to augment existing capacities within the ISS.²⁰ Additionally,

FCs could be encouraged to assess the operational capacities of their staff to plan and use helicopters, while additional training could be provided to leaders of the military component regarding the unique demands and management processes employed by the UN on peacekeeping missions.

To enhance utilization of helicopters and address TCC concerns regarding command and control and tasking, the UN could introduce 'military aviation cells' at Force HQ level (to plan, integrate and task military aviation assets) and within the OMA (to exercise oversight, to educate and advise mission leadership on employment and management of helicopters, to collect lessons learned and to liaise with emerging TCCs).

A recurring concern for a small number of TCCs, for example Ghana, has been applicable safety standards and their operational implications. While not directly related to force generation, the perception of how UN safety standards are applied shapes views on whether assets would be used to maximum effect or limited in their operational deployment, thus reinforcing concerns about command and control. Written UN policies make clear that it is the national rules and regulations of the contributing country that apply to employment of MUHs.²¹ At issue is this clause: '[i]n the event of discrepancies between the rules and regulations of the troop-contributing country, the UN, and the host country regulations, the most restrictive provision applies'.²² Like tasking procedures, there appear to be varying interpretations of what the provision of the policy refers to. According to the DFS, it refers to certain minimum technical specifications and aircraft equipment. Nonetheless, the perception persists among some TCCs – for example Australia – that where national operational safety rules conflict with UN/ICAO standards, the latter prevail, though we could not determine whether this perception is due to restrictive interpretations of the UN safety policy by civilian mission personnel.

On occasion, restrictive interpretations by TCCs of their own national rules and regulations have resulted in unofficial national caveats limiting the type of operations their air assets can undertake – for example, having troops abseil from a hovering helicopter to the ground. Such risk aversion by TCCs has been attributed by other member states, such as Canada and the Netherlands, apparently erroneously, to application of overly stringent UN (and ICAO) safety standards or weak command and control. The proposal for a model LoA (addressed below) outlining operational and tactical requirements expected from helicopter providers may help to better prepare contributors for the conditions to which their contingents will be exposed.

The additional requirements on minimum aircrew experience have a more direct impact on force generation. Several current helicopter providers, including Chile, stress their lack of experienced pilots that meet UN qualifications. For the flight captain, the requirement is a minimum of 1,000 flight hours, including no fewer than 250 in the specific aircraft to be flown during the mission. This limits the number of helicopters they are able to deploy in order to ensure sufficient training for the rotation of flight crews. These TCCs argue that national standards for flight captain eligibility should be applicable, rather than the UN standard. However, as national standards vary greatly, the DFS and other TCCs argue

that a uniform minimum standard is needed to ensure that all pilots have sufficient experience flying under the difficult environments that UN missions often pose. According to DFS, the 1,000-hour rule was based on the time typically required for an aviator to finish flight school, acquire proficiency as a single pilot in a small helicopter, train as co-pilot on a medium helicopter and then acquire experience as pilot-in-command prior to UN deployment. This contrasts with an equivalent requirement of 3,000 hours typically required for commercial medium utility pilots. Further study would be required to determine whether revising UN requirements on pilot qualifications would result in additional helicopters for peacekeeping operations, as well as to evaluate the potential offset in terms of aviation safety.

Administrative, Procedural and Financial Challenges

The speed of administrative processes between the UN and TCCs, from negotiating a new LoA to rotating assets for major maintenance, do not appear to be significant deterrents to the provision of helicopters but, when added to frustrations over reimbursement and other issues, can be counted as exacerbating factors. Typically, once a TCC has agreed to provide helicopter assets, the process of establishing a new LoA takes up to three months. However, protracted negotiation and late agreement of LoAs between the DFS Aviation Transport Section and India, on occasion, have resulted in the delayed deployment of helicopters to missions and, for renewals, grounding of helicopters already in mission.²³ From the perspective of helicopter force generation, excessive delay in issuing LoAs has resulted in frustration among at least some TCCs, on the one hand, and DFS, on the other.²⁴ For the former, the UN's internal procurement processes are too time consuming, while the latter finds that negotiation processes are protracted because final decisions are made by a TCC's capital and not by the military advisers in New York.

Among many TCCs, including Ukraine, there is an additional perception of bias in favour of tasking civilian contracted helicopters rather than MUHs where the task can be performed equally well by either. According to this argument, the 'annual guaranteed fixed costs' of contracted providers have already been paid, therefore creating a disincentive for the mission to use military utility helicopters, which are reimbursed for actual flight hours. Anecdotal data suggest that in MONUSCO a majority of operational tasks requiring helicopters can be undertaken by civilian assets.²⁵ Moreover, data from the UN Mission in Liberia for 2003–09 indicate that the majority of helicopter operations were conducted by civilian helicopters.²⁶ The perceived bias may be due, in part, to the insufficient operational expertise in mission-level military aviation planning noted above. Also, military components may not be advocating the capabilities that MUHs can bring to bear. Since civilian tasks can be conducted by military helicopters, many states question the comparative cost-effectiveness of civilian contracted helicopters and MUHs. Documents from Ukraine suggest that the annual cost differential could be as much as US\$18 million more for eight Mi-8 civilian than for eight Mi-8 military helicopters.²⁷ A cost–benefit analysis of

the operational and financial trade-offs involved in using commercial helicopters rather than MUHs, along with an assessment of the operational tasks actually required by different missions, is necessary to better understand the optimal balance of these assets.

Under the existing system of reimbursement, all military helicopters (utility and attack) provided by TCCs to UN peacekeeping operations are allocated through the LoA. Based on the military concept of operations for a mission, the LoA provides an agreed amount of maximum flight time for which a helicopter can be tasked per month. The terms of reimbursement in the LoA are negotiated by the DFS on a bilateral basis with the TCC typically for a period of one year, with a renewal option for a second year. The respective TCC and the DFS Logistic Support Division negotiate the reimbursement rates for the services to be provided based on the type of helicopter, as well as negotiate the provision of special equipment and other specialized capability. All other specifications regarding the contingent and its personnel, including reimbursement rates for the aircrew, are included under a separate memorandum of understanding (MoU) and fall under the rules and regulations of the system of Contingent Owned Equipment (COE).

According to several major helicopter providers, the LoA system offers flexibility to account for differences in helicopter models and equipment, maintenance costs and other variables to allow negotiation on reimbursement on a case-by-case basis. Nonetheless, the majority of TCCs interviewed raised concerns over the portions of the LoA that affect reimbursements, particularly those relating to flying hours, the lack of tactical and operational specifications in LoAs, and the lack of guidelines for TCCs negotiating the LoA. Both TCCs and the DFS also noted frustrations over the time required to negotiate new LoAs (and to renegotiate them if the TCC seeks a revised rate of reimbursement upon renewal).

In contrast to nationally owned assets, such as armoured personal carriers (covered by the COE system and for which the TCC receives reimbursement even when the asset is not tasked), the LoA system provides for helicopter assets to be reimbursed only for actual hours flown, not allocated maximum flight hours. According to anecdotal flight data from helicopter providers, helicopters fly between 55 and 70 per cent of the allocated hours specified in the LoA. According to the DFS, the estimated average usage rate is between 60 and 65 per cent (100 per cent rates are not achieved due to weather and other factors). The anecdotal flight data suggest that some military helicopters are being used far below the average rate, and this adversely impacts on pilot training and currency by reducing the amount of time pilots spend in the air. A mitigating factor in usage rates is the issue of national caveats or risk aversion on the part of certain TCCs, such as the unwillingness to undertake assigned flight tasks. This was commonly noted by TCCs and UN personnel. In at least some cases, the operational advantages theoretically provided by military helicopters (such as use of uncertified landing zones, and night flights) over commercially contracted helicopters are not being realized. Further analysis by the DFS would be needed to determine the extent of this phenomenon and its impact both operationally and on utilization rates and, by extension, reimbursement.

Many TCCs argue that the reimbursement gap undermines their ability to sustain helicopter units in peacekeeping missions for several reasons. The LoA (together with the MoU) operates on a 'wet lease' basis under which the TCC is responsible for covering maintenance costs for their helicopters. These costs are ongoing whether the helicopter is used or not. This also includes costs for major maintenance, which must be conducted outside the mission area (typically after 500 flying hours) and which the TCC often pays in advance to service agents prior to deployment. These fixed expenses translate into financial losses for the TCC if the helicopter is tasked less than the agreed flying time in the LoA and the reimbursement amount proves insufficient to cover the accumulated costs. In addition, depending on how many hours are tasked to a specific contingent, the TCC may also need to arrange for a more frequent rotation of the aircrew to ensure fulfilment of pilot flight-training requirements.

Several solutions to these obstacles have been discussed in various forums, involving TCCs, financial contributors to peacekeeping operations, and the UN Secretariat, including the 2011 COE negotiations. While raising the reimbursement rates for helicopters was advanced during the negotiations by Ukraine and India as an option to alleviate strains on TCCs, some state representatives argued that an increase alone would not suffice, especially given the apparent usage rates, which would translate into a continued shortfall. Meanwhile, some financial contributors from the EU raised concerns about increasing the reimbursement rate without a clear indication of the financial consequences entailed, and called for more data on usage rates in order to make an informed decision about an appropriate rate of reimbursement.²⁸

At the 2011 COE negotiations, a group of TCCs, led by Ukraine and India, proposed the inclusion of a level of guaranteed minimum monthly flying hours in the LoA,²⁹ for which the TCC would receive reimbursement irrespective of whether the helicopter was been tasked or not.³⁰ The guaranteed minimum, it was argued, is roughly analogous to the fixed cost portion of a commercial contract for helicopters. Proponents of this option – which was ultimately defeated – argued that payment of minimum monthly flight hours would not increase mission budgets because the UN has already allocated money to cover the cost of full utilization of flight hours in the LoA.

The option was ruled out because a realistic number of guaranteed hours would have to be established on a mission-by-mission basis, as operational needs and mission environments vary greatly. Use of air assets is subject to variables: operational and tasking prioritization, weather conditions, restrictions from host countries, and force majeure. As a condition, TCCs would not receive reimbursement for guaranteed monthly flying hours if they failed to maintain operational readiness of the air assets and related equipment, or if they refused to comply with tasking of the helicopter for reasons not directly attributable to the UN or to restrictions by the host nation. Alternative criteria for reimbursement would be necessary for helicopters placed on standby. The DFS would likely need to establish a more precise monitoring system to record hours flown, as well as reasons why any tasking was not executed – with greater accountability mechanisms for both TCCs and commercial contractors.

While general services, technical specifications and minimum requirements for equipment are clearly indicated in the LoA, the document lacks specifications on operational and tactical requirements, such as the ability to conduct night operations and to provide the agreed services under hostile operating environments, expected from the TCC. The vague or incomplete content in the LoA on these requirements has been cited as one of the primary limiting factors in the tactical use of military utility helicopters.³¹ A TCC may disallow tasking of its helicopters in specific, usually challenging circumstances, even though the assets are operationally ready to deploy.

Outlining the operational and tactical requirements (OTRs) of helicopters in the LoA might help to further maximize their use in missions by making TCCs more aware of the specific requirements and securing their explicit agreement to fly under particular conditions. In April 2009, the Informal Working Group on the Tactical Use and Tasking of Military Utility Helicopters in UN Missions developed and proposed a model LoA, specifically for helicopters, that would have provided the full spectrum of possible OTRs. It was intended to serve as a basis for negotiations between TCCs and the UN. The proposal stipulated that the OTRs would be established by OMA depending on the requirements of specific mission environments and negotiated with the TCC.³² The model LoA would allow TCCs to subtract any requirements they were unwilling to undertake from an explicit and comprehensive menu of OTRs, rather than agreeing to provide services to missions generally but then imposing operational restrictions in the field. During the 2011 COE Working Group, the proposal for a model LoA was rejected by a majority of member states because, as presented, it was deemed too prescriptive. As noted, the major strength of the LoA in the eyes of many countries is that it is a flexible contract, not bound by the strictures of the COE system. More broadly at issue is the tension between codifying procedures in a formula and leaving enough flexibility for individual contributing countries to negotiate the most favourable arrangements, thereby motivating them to provide assets.

Officials from new or potential helicopter-contributing countries interviewed expressed their disadvantages when negotiating terms of the LoA, compared with long-standing contributors, experienced in negotiating the agreement. Indeed, the currently available template LoA in the UN Procurement Manual only lists generic points and does not provide guidance on the full breadth of terms and conditions that deployment can entail. A few TCCs, for example the Netherlands, have thus proposed that any model LoA should include the full scope of terms and conditions for aviation services involving state aircraft in order to guide new TCCs, as well as potential TCCs, to fully understand the necessary performance criteria and conditions of deployment.³³ Increased transparency in the procurement process may establish the perception of a more equal basis of negotiation for all TCCs.

A final set of challenges concerns the COE system. Some countries, for example Bangladesh, have indicated a preference for MUHs to fall under a classification scheme in the COE system. Setting a classification-based reimbursement rate for utility helicopters would eliminate a major source of contention in negotiations

between contributing countries and the UN, and could thus facilitate the procurement process. This would likely have the effect of levelling the playing field in the eyes of potential and new contributing countries that may be at a disadvantage compared with established contributors in reimbursement negotiations. Under this option, MUHs could be classified as 'special case equipment', with a classification system for different types of helicopters and standardized reimbursement rates irrespective of actual usage. However, most current MUH contributors, including India and Italy, prefer non-standardized reimbursement rates that are negotiated under the LoA, largely because rates are renegotiated every 12 months with the possibility of an annual extension, whereas under the COE system standardized reimbursement rates are reviewed (and not necessarily changed) every three years. The LoA agreement system is more flexible than MoUs, and gives contributors more room in negotiating terms of contract.

Another argument advanced against the standardization of reimbursement rates for helicopters is the perceived difficulty in establishing a common rate that would apply to all helicopters because of the breadth of types and models available. Questions relating to the quality of the airframes, especially in regard to older and newer models, were also raised in interviews by certain TCCs, including Pakistan. This may become a potentially contentious point between contributors, because some are more likely to contribute older assets than others. The age of the helicopter is a commonly cited reason for increased financial costs of maintenance. At present, there does not appear to be sufficiently broad consensus to place MUHs under a helicopter classification system.

Other Options for Overcoming Force Generation Challenges

A review of existing concepts of operations may help to determine whether the force requirement is accurate and whether fewer helicopters are required. Steps could be taken to determine whether existing helicopter providers would be willing to shift helicopters to other missions. According to officials from the DPKO/OMA, a 2011 internal review of force requirements in MONUSCO, for example, reduced the number of helicopters needed from 48 following a crisis in Goma in 2008 (under MONUC), to 29. The establishment of 'military aviation cells', described above, would also enable missions to more closely review force requirements on the basis of use rates and evolving conditions in the area of operation. In setting the force requirement, greater focus could also be given to the capabilities that could only be conducted by military aircraft and aircrew, including rapid force projection, deterrence and air support to troops.

Peacekeeping missions are typically deployed with mandates that are renewed on an annual basis. Yet, the operation in the DRC is now in its eleventh year, UNMIL in Liberia in its eighth, and UNMIS in Sudan – up to its closure in July 2011 – in its sixth. Given the length of most peacekeeping operations, it may be cheaper and more reliable to use fixed-wing aircraft for certain tasks. A DFS/DPKO review of existing concepts of operations could help determine whether more fixed-wing aircraft, possibly in combination with more troops or

unarmed aerial vehicles, could make up for shortfalls in helicopters. This would require an examination of the cost-effectiveness of developing the runways and airport facilities needed for more fixed-wing aircrafts. Depending on local infrastructure, this could be expensive but might offer the benefit of creating an infrastructure that can be left behind when the mission closes.

Also related to mission planning, the landmark 'Brahimi Report' argued in favour of a two-stage mandate in which final authorization depended on the willingness of TCCs to provide necessary capabilities.³⁴ Currently, the mission 'concept of operation' is the basis for determining how many helicopters will be necessary. Yet, given the 'capability gap' in helicopters and other critical equipment, it may be more realistic to determine the final scope of a mandate against available assets. Indeed, the willingness of TCCs to provide troops, helicopters and other key assets could be used to select the most appropriate concept of operations from a menu of options. This, however, would require a radical rethinking of the way that peacekeeping operations are currently designed and authorized.

Two TCC officials interviewed noted that their countries had helicopters outside their official roster requiring refurbishment for which there was no national budget allocation. No information was available from the TCCs regarding the numbers of helicopters, their condition or the estimated cost of repair. Such surplus raises the possibility of one or more donor countries financing refurbishment for use in UN peacekeeping operations. Indeed, at least one TCC (Rwanda) is expected to provide helicopters to UNAMID on this basis in 2011. Nonetheless, apart from costs, some factors might mitigate against sponsorship, including national security concerns over 'dual use' of military assets. Any concerns would have to be addressed on a country-by-country, case-by-case basis. Bilateral training of helicopter pilots would be particularly helpful for countries that have smaller pools of pilots with the requisite experience to serve as flight captains in UN operations, and which face difficulty in assembling three crews per helicopter to support rotations.

Whether or not there is resolution of UN command and control arrangements in a mission, and particularly in the light of national priorities and overlapping multilateral commitments of particular providers, enhanced use of 'green-blue' arrangements is a possible alternative. As in other hybrid operations, a second multilateral organization – the EU, for example – could deploy helicopters to a mission environment under a separate chain of command. While such arrangements appear most practical for tactical helicopters, which could conduct operations in line with overall mission strategy and priorities, 'green' MUHs could be used for casualty and medical evacuations, patrol and reconnaissance flights and logistics operations. Such arrangements would have significant budgetary implications, however, as UN member states would most likely bear the full cost of deployment, operations and maintenance. For such arrangements to work reliably and effectively they would also have to overcome past 'dual key' challenges to ensure the availability of such assets when needed.

The transfer of military utility and attack helicopters from neighbouring Liberia to Côte d'Ivoire, respectively in November 2010 and in April 2011

during the electoral crisis, suggests that the sharing of helicopters between adjacent missions may be a means of meeting force requirements. For helicopters provided by TCCs, LoAs would have to be structured to reflect this flexibility (including, for example, comparative risk to aircraft) so as to avoid routinely having to go back to TCC capitals for authorization. The DFS Global Field Support Strategy³⁵ likewise may encourage asset-sharing across missions, including civilian political missions. As of 2011, UN budgetary restrictions on transfer of monies between missions presents an obstacle to more systematic asset-sharing across missions. Some member states also raised concerns over the impact of inter-mission asset-sharing on missions' operational effectiveness, since fast-changing situations may necessitate the unforeseen deployment of assets. In these situations, missions that have lent their assets to another operation may not be able to recall them in time. There is a risk, however, that inter-mission asset-sharing could adversely affect the lending missions' operational effectiveness, since fast-changing situations may necessitate the unforeseen deployment of assets. In these situations, missions that have lent their assets to another operation may not be able to recall them in time to respond to emerging crises.

Conclusion

A resolution of the force generation challenges for helicopters in UN peacekeeping operations must contend with balancing operational demands and flexibility against better defined and institutionalized procedures regulating the use and reimbursement of these assets. This will require a multifaceted strategy addressing deficiencies in overall supply, clarifying administrative and procedural ambiguities at UN headquarters and in the field (including helicopter tasking and command and control), making mission planning and procurement procedures more effective and transparent and revisiting reimbursement rates. There is no fix in one area only.

This is not to say that solutions are elusive or shortfalls in available helicopters cannot be met. In the short term, the least worst option may be to utilize civilian contracted aircraft to fill gaps. Initial findings from MONUSCO suggest that this may be possible without undue negative effects on the mission. Moreover, as many UN operations enter consolidation phases, when hostilities become less frequent, shifting towards the use of more civilian aircraft may prove appropriate. However, there are three cautionary factors to consider with civilian contracted aircraft: ICAO standards restrict the use of civilian helicopters to largely logistical tasks; evidence suggests that on average civilian contracted helicopters are twice as expensive as MUHs; they may impact adversely on the ability of TCCs to sustain deployment, and risk alienating contributors that perceive a UN bias in favour of civilian contracts over MUHs.

This underlines the point that the use of more civilian contracted assets should not preclude addressing the negative perceptions among current and potential MUH contributors about the UN's procurement, tasking and reimbursement processes. Improved UN policies, procedures and structures would help, though not completely redress, the existing gap. Indeed, a basis for effective, sustainable

peacekeeping is the broad participation and contribution of UN member states to a shared responsibility for the maintenance of international peace and security. The partnership between the UN Secretariat and contributors remains essential. Moreover, as is the case with troop and police contributors, the limited pool of MUH and attack helicopter contributors is a strategic concern for the UN. Broadening the base of contributing countries, however politically challenging, should remain a priority.

ACKNOWLEDGEMENTS

An early draft of this article was presented at a workshop hosted by the Center on International Cooperation and the US Global Peace Operations Initiative (GPOI) in New York, 27–28 April 2011. This version reflects additional issues and comments raised by UN force commanders subsequently presented with the research findings. The authors would like to thank Morgan Hughes, Yanikk Lewis and Tristan Driesbach, Center on International Cooperation, as well as the many government and UN officials who agreed to be interviewed for this study.

NOTES

1. 'UN Peacekeeping Missions Face Shortfall of Over a Third in Vital Military Helicopters', *UN News Service*, 22 Feb. 2011, (at: www.un.org/apps/news/story.asp?NewsID=37594&Cr=peacekeeping&Cr1=).
2. 'Predictive Evolution of Number of Military Helos', UN Force Generation Service, Feb. 2011 (on file with the authors).
3. Data provided to the Center on International Cooperation by the UN Department of Field Support (on file with the authors).
4. Author interviews with military officials of the permanent missions to the UN of 30 states, New York, January–February 2011, notes on file with authors.
5. Center on International Cooperation, *Annual Review of Global Peace Operations 2011*, Boulder, CO: Lynn Rienner, 2011, p.109.
6. Though the UK and France were able to mobilize attack helicopters for NATO's mission in Libya in 2011.
7. In August 2006, the UN established the Strategic Military Cell within DPKO's OMA to provide enhanced assessment, intelligence and contingency-planning mechanisms for the United Nations Interim Force in Lebanon (UNIFIL) II, at the behest of European TCCs. Since February 2004, UNIFIL force commanders have come from France, Italy and Spain.
8. Colum Lynch, 'India Threatens to Pull Plug on Peacekeeping', *Foreign Policy.com*, 14 June 2011 (at: http://turtlebay.foreignpolicy.com/posts/2011/06/14/india_threatens_to_pull_plug_on_peacekeeping).
9. *Signal*, Representative Association of Commissioned Officers (Ireland), Vol.8, No.1, 2009 (at: www.raco.ie/attachments/059_Signal_8_1.pdf).
10. According to the DPKO OMA, two additional helicopters are expected from Niger, three from Rwanda and up to six from Mongolia by late 2011.
11. See, for example, Takshashila Institution, Indian National Interest Pragmatic Euphony blog (at: <http://pragmatic.nationalinterest.in/2010/08/05/hell-o-copters/>).
12. *Signal* (see n.9 above).
13. Author interviews with Chilean government official, New York, 2 Feb. 2001, and Argentinean government official, New York, 11 Feb. 2001.
14. UN DPKO/DFS, 'Authority, Command, and Control in United Nations Peacekeeping Operations', Ref. 2008.4, Feb. 2008, paras.74–5 (at: www.peacekeepingbestpractices.unlb.org/PBPS/Library/Authority,%20Command%20and%20Control%20in%20UN%20PKOs%20FINAL%20SIGNED%2015%20Feb%202008.pdf).
15. UN Operational Control is defined as '[t]he authority granted to a Military Commander in a UN Peacekeeping Operation to direct forces assigned so that the Commander may accomplish specific missions or tasks which are usually limited by function, time or location (or a combination), to deploy units concerned and/or military personnel, and to retain or assign tactical command or

- control of those units/personnel'. Tactical Control is defined as '[t]he detailed and local direction and control of movement, or manoeuvre, necessary to accomplish missions or tasks assigned'. UN DPKO/DFS, *ibid.*, para.9.
16. Informal Working Group, 'Views and Recommendations', report, 15 April 2009, on file with authors.
 17. *Ibid.*
 18. Discussions under the Chatham House rule at the joint Center on International Cooperation and US Global Peace Operations Initiative workshop on 'Addressing Challenges Related to Force Generation for Helicopter Units in United Nations Peacekeeping Operations', New York, 27–28 Apr. 2011.
 19. *Ibid.*
 20. *Ibid.*
 21. Report of the Secretary-General, 'Administrative and Safety Arrangements Relating to the Management of Military Utility Helicopters to Peacekeeping Operations', UN doc., A/64/768, 4 May 2010, para.17.
 22. *Ibid.*, para.17, emphasis added.
 23. UN Office of Internal Oversight Services (henceforth OIOC), 'UNIFIL Air Operations', Audit Report assignment no.AP2008/672/01,16 Mar. 2009, para.42; author interview with Indian official, New York, 11 Feb. 2001, notes on file with author. According to OIOS, 'the workload within ATS appears unmanageable at current at staffing levels', OIOS, 'Management of Peacekeeping Air Operations', Audit Report assignment no.AP2008/600/03, 28 Aug. 2009, para.72.
 24. Author interview with Indian government official, New York, 11 Feb. 2001, and DFS official, New York, 16 Mar. 2011, notes on file with authors.
 25. Author interview with OMA staff, Mar. 2011, notes on file with authors.
 26. Email from UNMIL Chief of Air Operations to the authors, 13 Mar. 2011, on file with authors.
 27. Approximately US\$19 million for eight military MI-8s, versus US\$ 31–37 million for eight commercially contracted Mi-8s. 'Shortage of Military Helicopters for UN PKOs', memo prepared by Military Adviser Office to the Permanent Mission of Ukraine to the UN, New York, Apr. 2009.
 28. Author interview with Danish government official, New York, 28 Feb. 2001.
 29. The rate initially proposed during the 2011 COE Working Group for guaranteed flying hours was 60 per cent of the allotted monthly hours in the LoA. If the country refused to fly due to non-readiness then the reimbursement would be calculated on actual hours flown and/or deducted from the minimum guaranteed hours. COE Working Group Report and Proposed Model Letter of Assist (LOA) for the Provision of Helicopters General Terms and Conditions, 2011.
 30. Proposals grouped under the 'Ukrainian Helicopter Initiative', on file with authors.
 31. Informal Working Group on 'Tactical Use and Tasking of Military Helicopters in UN Missions: Views and Recommendations',15 Apr. 2009, on file with authors.
 32. Letter from Col. Jacques Morneau, the Chairman of the Informal Working Group, to Under Secretaries-General, Alain Le Roy and Susanna Malcorra, 'Review of UN HQ Policy and Documentation on the Tactical Use and Tasking of Military Utility Helicopters in UN Missions', 15 Apr. 2009, on file with authors.
 33. UN, Issue Paper No.1.J,1.0 (Draft No.4), submission to the Working Group on Contingent Owned Equipment negotiations by India and Ukraine, 26 Jan. 2011, on file with authors.
 34. UN, 'Report of the Panel on United Nations Peace Operations', UN doc., A/55/305-S/2000/809, 21 Aug. 2000.
 35. UN, 'Report of the Secretary-General – Global Field Support Strategy', UN doc., A/64/633, 26 Jan. 2010.