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LEADING THROUGH TRANSITION

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HOT TOPICS 2012

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Intel and early warning

Peacekeeping's high tech imperative

In traditional peacekeeping, United Nations soldiers served as observers of static military forces, patrolling between opposing belligerents to reduce the chance of firefights. The peacekeepers' main task was to "observe and report." When the Cold War ended the mission mandates expanded to a new and vast set of challenging tasks such as: humanitarian aid distribution; disarmament and demobilization of former combatants; security sector reform; election organizing; economic assistance; peacebuilding (both physical and social) of war-torn infrastructure; sanctions monitoring; and peace enforcement. In the 21st century, ambitious civilian protection mandates were added to all newly created UN peace operations.

All this means that UN forces must now monitor large areas for a wide range of activities including nefarious covert efforts to spoil peace processes and to attack civilians. Peacekeepers must locate and intercept clandestine arms shipments, uncover evidence of atrocities for courts and tribunals, and help fragile states govern during transitional periods. Such is the enormous burden of modern multi-dimensional peace missions.

Furthermore, the environments of peacekeeping missions are more complex than in the past. Belligerents cannot be easily identified or located, often mixing with civilian populations. Other actors, such as non-governmental organizations and nascent host-governments, have become key players and partners in complex UN missions. This has amplified the UN's requirements: a keen sense of situational awareness; proactive information/intelligence gathering; a surveillance capability; and the ability to exercise effective responses through professional command and control over UN forces.

Fortunately, in the modern age, technologies can help considerably with these demanding requirements. Unfortunately, the technological side of peacekeeping has not evolved alongside the operational side, even as the need is great and many technologies are readily available.

In contrast to peacekeeping, war-fighting has benefitted immensely from new and wide-ranging technologies and methods, especially in network-enabled operations based on advanced Command, Control, Communications and Computers, Intelligence, Surveillance and Reconnaissance (often shortened to C4ISR).

Advanced technological capacity had tremendous success recently in the UN-sanctioned, NATO-run aerial operations over Libya. Not a single allied solider was killed while precision-guided munitions were able to pinpoint Gadhafi forces without causing minimal civilian fatalities on the ground.

This example of technologically intensive warfighting, involving the latest in surveillance and monitoring technology – for a war fought on "humanitarian grounds" – illustrates the gap between high-technology operations and the peacekeeping operations that the UN conducts. For example, blue helmet forces recently instructed villagers under threat of attack to bang "pots and pans in order to sound the alarm" of a pending attack to alert UN forces nearby.

Unfortunately, when UN peacekeepers are deployed today, peace is waged by technologies of the 1980s or older – sometimes dating back to World War II. Exponential advances in monitoring and surveillance technology have so far been unleveraged by the UN, resulting in a distinct disadvantage for the world body that is responsible for the maintenance of international peace and security.

Shortcomings in information-gathering and early warning have accounted for many failures in UN missions. This should not be the case in our modern globalized world. Cost-effective technologies are available to increase the efficiency and effectiveness of military operations so they can better achieve the ambitious mandates set out by the Security Council. Here are some technological examples.
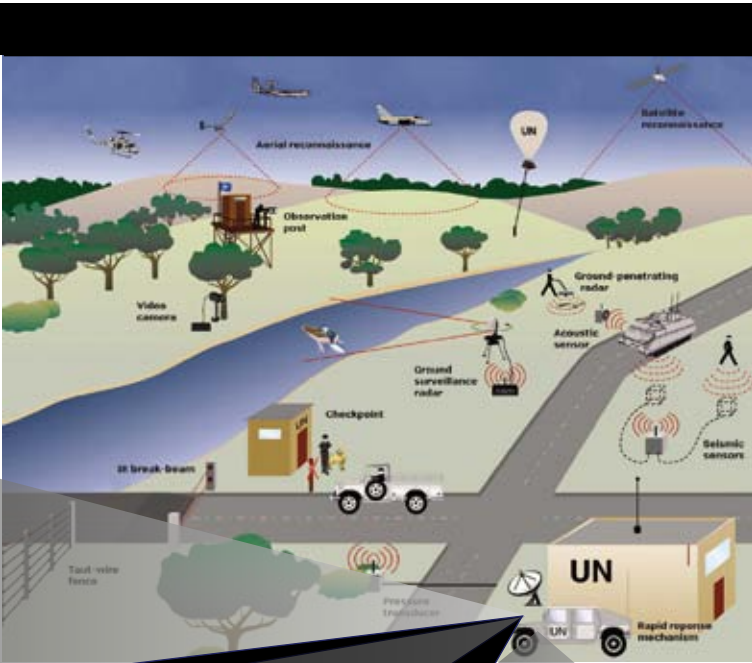
Camera systems placed in hot spots can allow the UN to monitor outbreaks of conflicts, especially in areas where peacekeepers are not physically present. The UN showed that this was possible when in 2008 it placed six cameras in a demilitarized zone between Greek and Turkish Cypriot forces (i.e., on "the Green Line"). This was a modest but important "baby step" for the UN. More ambitiously, high-resolution cameras on aircraft can benefit from the "bird's eye" view and cover large areas; satellites even more so. Non-governmental initiatives such as the Satellite Sentinel project provide early warning of attacks, e.g., in southern Sudan, using commercial satellite imagery that the UN could also purchase and analyse.

The use of GPS tracking systems to record the location and speed of UN vehicles can increase the security of UN personnel, allowing the organization to know when vehicles are stopped or in danger, and where they need to be rescued. This is particularly important in locations far from cities where communications are weak and independent local forces dominate.

Commercial cell phone technology has been advancing in leaps and bounds, including in the war-torn areas of the world. Cell phone usage approaches some 80 percent of the world's population. The profound and well-documented increase of information availability and transfer needs to be harnessed by the UN. Smart

phone technology allows for even smarter information sharing. After the Haitian earthquake, for example, aid agencies and the U.S. military collaborated and exchanged information on open-source platforms. Information on buried individuals, public health services and issues, vital logistics lines, security threats, infrastructure damage, natural hazards, etc., were uploaded by phone to a central website for all to see. In central Africa, near-real-time crisis mapping of the Lord's Resistance Army atrocities was enhanced by a dynamic database of attacks, geo-tagged, in an "open" database. An entire field of specialization, known as "Crisis Mapping" is developing in this domain; it is imperative for people on the ground that UN peacekeeping harness, support and leverage this technology in the service of peace.

While traditionally peacekeeping has been a daytime job, most of the nefarious actors in war-torn lands use the "cover of darkness" to conduct their illegal or threatening activities at night. In recent years, advances in night-vision technology and surveillance technologies have improved drastically allowing the UN, in principle, to overcome the "night barrier." With night vision goggles, peacekeepers could conduct operations around the clock, including robust operations. Nighttime awareness can be further enhanced with ground surveillance radars and acoustic/seismic sensors.

Similarly, when the UN conducts sanctions monitoring or weapons interdiction, it must have properly equipped missions to observe at night when illegal and clandestine shipments are usually made. For example, in the Congo arms smugglers have moved large quantities of small arms and light weapons into the country, while moving the country's precious minerals out, all the time outmanoeuvering the UN nocturnally. A study of the missions' ability to achieve its mandate of a weapons embargo on militants found that the mission "needs to be provided with the appropriate lake patrol and air-surveillance capabilities, including appropriate nocturnal, satellite, radar and photographic assets."

Combining, synthesising and understanding various surveillance streams is no small task. A multitude of competing requirements need to be met, including real-time mapping of NGO and UN movements, tracking and identification of possible arms smugglers, or night time attacks, to name a few. Fortunately, the UN has made considerable progress in incorporating analytical centres into its peacekeeping missions, even if not the technologies. Since 2006, UN missions have included "Joint Operations Centres" and "Joint Mission Analysis Centres," using mostly human-supplied information. Data from monitoring technologies can be used to collaborate or disprove the intelligence from human sources. This would be at the cutting edge of the emerging concept of "intelligence-led peacekeeping."

Effective intelligence-led operations require that the United Nations couple its traditional good offices with advances in technology. This will provide the world body the tools to build on past successes, and obviate gaps from the past. The basic principles that define peacekeeping – consent of the parties, impartiality and the use of force in a defensive manner – are enduring. What is needed now are modern technological means to help implement these principles for peace and security in the modern era. Canada is ideally suited to help provide these vital force multipliers. ◆