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Traditional peacekeeping: Cases

Modern UN peacekeeping has evolved from traditional missions, as described in Chapter 2. The basic monitoring tasks found in the earlier traditional operations remain in the newer multidimensional missions, though many new requirements were added. Because traditional operations illustrate some of the fundamental challenges facing all operations, they are examined here. Historical cases also provide an overview of past UN experience and show how the United Nations arrived where it is today. In addition, seven traditional missions are still in operation today, four of them keeping watch in the Middle East.¹ (A full list of peacekeeping operations is provided in Appendix 1.)

The Middle East was the “cradle” of UN peacekeeping – the place where peacekeepers were first trained and where common problems were first encountered and partly resolved. In these Middle East missions, the main mandate was (and remains) monitoring and verification. What did the peacekeepers observe in traditional peacekeeping? What methods did the peacekeepers employ? What technologies were used, if any? How was information shared with parties? Did the parties cooperate or obstruct the United Nations in its monitoring? The real-life operations described in this chapter illustrate both the benefits and the problems of monitoring and technologies, past and present.

The Middle East has been the site of 10 UN peacekeeping missions – more than any other region of the world except Africa. Six operations were established to help foster peace between Israel and the neighbouring Arab countries. Two were created to monitor cease-fires between Iraq

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and two of its neighbours: Iran at the end of the 1980–1988 Iran–Iraq War; and Kuwait after the 1991 Gulf War. Another two were created to verify the non-intervention of neighbouring states during the civil wars in Lebanon in 1958 and in Yemen in 1963–1964.

The following overview of missions is drawn mostly from the documents and publications of the United Nations.² In addition, a seminal early study, *International Peace Observation*, by David Wainhouse was consulted.³

Israel and its Arab neighbours

The first and longest-running peacekeeping operation in UN history, the United Nations Truce Supervision Organization (UNTSO), was actually established during, not after, the first Arab–Israeli war. Created by the UN Security Council on 29 May 1948 by Resolution 50 (1948) to supervise the truce (cease-fire) that the Council demanded of the warring parties, it soon assumed the task of verifying the four armistice agreements of 1949 negotiated between Israel and its four Arab neighbours, specifically Egypt, Jordan, Syria and Lebanon. The negotiations for these agreements were mediated by Dr Ralph Bunche, an American Under-Secretary-General from the UN Secretariat, who received the 1950 Nobel Peace Prize for his work.

The agreements established a cease-fire line called the Armistice Demarcation Line and various demilitarized zones (DMZs) between the Israeli and Arab nations' forces. The Armistice Demarcation Line of 1949 determined the borders of the Gaza Strip and the West Bank.

In UNTSO, the United Nations gained early experience with military observation and verification. The mission originated the concept of the United Nations Military Observer (UNMO) and determined that UNMOs should be unarmed, a tradition that continues today. The observers investigated armistice violations that came to their attention through complaints from the parties, from local civilians or from their own observation. After conducting on-the-scene investigations, often in conjunction with an attempt (sometimes successful) to mediate a local settlement, UNMOs would send reports to the UNTSO Chief of Staff, who was the top military officer and head of mission.⁴ He might then protest to the offending party at a high level (sometimes at the head of state level) or raise the issue in meetings, joint or single, with the parties. In more serious instances, he would inform the UN Secretary-General.

Each of the four 1949 armistice agreements created a Mixed Armistice Commission (MAC) to allow liaison between the parties, specifically Israel and each neighbour. The MACs included an equal number of

representatives, usually two or three, from Israel and the respective Arab state, with the UNTSO Chief of Staff or a designated senior UN officer serving as chairperson. As far as possible, issues were settled by consensus but, as one can imagine, on many occasions a deadlock prevailed, which could sometimes be broken only by the deciding vote of the chairperson. The UNTSO leader tried to be an impartial arbitrator but was nevertheless often criticized for not voting in support of each party.⁵

The majority of complaints heard by UNTSO related to: weapons firing; aircraft over-flights; the presence of troops in the DMZ; border crossings ranging from deadly raids to innocent sheep wanderings; and illegal plant cultivation. To give a sense of some of the challenging incidents that concerned UNTSO in its early days, Table 6.1 lists major events during 1955 that worried General E. L. M. Burns, the UNTSO Chief of Staff from 1954 to 1956. These incidents are drawn from his book *Between Arab and Israeli* (1962). UNMOs seeking to investigate such incidents would routinely invite military representatives from both sides to accompany them, but mostly they worked alone or with an escort from one side, since the parties regularly refused to work with each other.

Many problems were resolved in the MACs when the parties worked harmoniously, but over time the number of unsettled complaints became overwhelming. In October 1966, in the Syria–Israel MAC, for instance, there were 35,500 pending complaints from Israel and 30,600 from Syria. Managing the list became impossible. These and other warning signs of looming war emerged in early 1967.

For over 60 years, UNTSO has been sending regular reports to UN headquarters in New York describing the situation in the field. For the first few decades, if certain violations of agreements or Security Council resolutions were severe, the Chief of Staff could cable special reports directly to the UN Secretary-General, who could inform the Security Council. The Council could, in turn, issue condemnatory statements or resolutions, but it rarely took decisive action. Before the 1956 and 1967 Arab–Israeli wars, the number of violations increased significantly, as did the number of UNTSO protests. UNTSO also sent some warnings about the rising risk of war at other times,⁶ but UN actions were not always enough to prevent renewed warfare. UNTSO did de-escalate many flare-ups that could have turned into wars.

An example of the United Nations' capacity to de-escalate a conflict was provided by UNTSO. In July 1955, the Jordanian army rushed troops to reinforce its positions on the West Bank after hearing reports of a possible Israeli attack on Jerusalem. The UNTSO head, General Burns, sought out Israeli Foreign Minister Golda Meir to discuss this "war scare". Mrs Meir was able to reassure him that there was no concentration of Israeli troops in the Jerusalem sector, confirming the information

Table 6.1 UNTSO investigations: Major examples from 1954/55

Incident	Description	Comments	Date
Kibbutz Ein Hashofet sheep Gaza raid	Sheep were taken by Jordanians. Israeli PM asked UN to help find a peaceful solution Two Israeli platoons attacked a military camp; 36 soldiers and 2 civilians were killed in the most serious clash since the armistice	Sheep were returned to kibbutz after 12 days of UNTSO mediation Serious escalation of fighting	27 September 1954 28 February 1955
Mortar fire on a kibbutzim	UNMOs observed that Egyptians began the shooting by firing on an Israeli jeep	Based on UNMO reports, the UNTSO commander convinced President Nasser that he was receiving inaccurate reports about incidents on the Gaza border UNMOs found and interrogated a wounded infiltrator and directly verified Israeli allegations of Egyptian complicity in planning the attacks	30 May 1955
First <i>fedayeen</i> attacks	Palestinians trained and supported by Egypt killed around a dozen Israeli civilians and soldiers near Gaza, a sudden increase in violence	Six UNMOs had been detained in Beersheba by the Israeli authorities to prevent them from seeing preparations for the attack	25–28 August 1955
Khan Yunis retaliatory raid	Israeli armoured unit destroyed police station and partially damaged the nearby hospital, leaving approx. 36 dead	UNMOs inspected kibbutz and noticed unmarried occupants and lack of farming but found no weapons. They further learned from an Israeli deserter (soldier) in Egypt that its inhabitants were all soldiers, as later confirmed. MAC called the new settlement a breach of the armistice agreement, but an Israeli appeal put the decision in limbo. The UN Security Council did not act. On 26 October, Egyptians raided one of the “civil police” posts	31 August – 1 September 1955
Ketsiot kibbutz near El Auja DMZ established. Local Bedouin killed	Israel claimed this was a new civilian settlement in this strategic area of the Negev desert. Egyptians claimed it was a military settlement. Kibbutz members did not engage in farming but wandered around the DMZ looking for “archaeological specimens”. UNTSO commander allowed police to protect the kibbutz but Israel used undercover military forces as police instead		28 September 1955

Israeli raid on Egyptian police posts	Egyptians had created checkpoints a few metres inside the DMZ. They later threatened to fire at anyone approaching the checkpoints, including UNMOs. Israelis objected to the checkpoints	Israelis invaded an Egyptian police post at El Kuntilla, killing 5 Egyptians and taking 30 prisoners, who were not returned until after the 1956 War	28 October 1955
Total number of dead owing to aggression near Israeli-Arab borders	In 1955 on the Egypt-Israel front alone: 47 Israelis killed, 118 wounded; 216 Egyptians and Arabs killed, 188 wounded	Not all incidents reported could be investigated; e.g. the backlog since 1953 built up to over 2,100 cases in the Jordan-Israeli MAC	1955

that Burns had received from his own UN military observers. He then conveyed the Israeli assurances to the commander of the Jordanian army in Amman. The commander agreed to withdraw his reinforcements on condition that further inspections by UNMOs confirmed the Israeli assertion. Apparently, the false alarm was sounded by apprehensive Jordanian agents who merely watched traffic on certain roads into Jerusalem. It was easy for UNMOs to disprove the allegations through careful counts and surveys. In the end, the Jordanian forces were withdrawn, something confirmed by UNMOs, thus bringing the immediate threat of escalation to an end. By 1956, however, UNTSO could not prevent a new war between Egypt and Israel, though Jordan and other Arab nations stayed out of it.

A new and stronger type of UN operation was created in 1956 on the initiative of Canadian Foreign Minister Lester B. Pearson in order to separate Egyptian and Israeli armies. The new UN force also helped France and Britain save face, since they had deployed their forces to gain control of the Suez Canal. UN forces assumed the positions of these departing forces.⁷ UN Secretary-General Dag Hammarskjöld, in a historic report (UN Secretary-General 1956) to the General Assembly, set out the basic principles that were to guide this operation and future traditional peacekeeping. The first interpositional peacekeeping force, the United Nations Emergency Force (UNEF), was born out of crisis, as would be many other peacekeeping forces. General Burns was transferred from UNTSO to serve as the commander of this new type of UN force and Lester B. Pearson won the Nobel Peace Prize in 1957 for its creation.

After the 1956 War, Israel refused to take part in the Egypt–Israel Armistice Commission, though it participated in the three other MACs. Thus, no joint consultative machinery was functioning to discuss and resolve armed incidents between Israel and Egypt, though a Joint Commission chaired by a UN representative was eventually set up in 1975. UNEF reported on violations and, if warranted, protested to the relevant authorities. Soon after Israel's withdrawal from Egypt in 1956, UNEF established six observation posts (OPs) along the Sinai border and over two dozen observation posts inside the perimeter of the Gaza Strip.

The peacekeepers used binoculars at their observations posts and on patrols. "Dual-use" aircraft performed both resupply and reconnaissance flights (UN Secretary-General 1961). The Canadian-provided aircraft patrolled the international frontier on average four times a week but only in daytime. The aircraft had no onboard sensors, although hand-held cameras were probably carried by observers on board. The air patrols were linked by wireless communication to reconnaissance units on the ground, so suspicious activities seen from the air could be checked by ground patrols.

During critical times, the two UN missions, UNTSO and UNEF, passed vital information to New York. The missions served as the eyes and ears of the United Nations in the Middle East. For instance, UN Secretary-General U Thant first learned about the outbreak of war on 5 June 1967 in a cable from the UNEF Commander at 0300 hrs.⁸ An early warning of impending hostilities had come a few weeks earlier when the UNEF Commander was requested by the commander-in-chief of the Egyptian Armed Forces to withdraw all UN troops along the border. As a result, U Thant went on a peace mission to the Middle East but, before he arrived in Cairo, Egyptian forces had taken over UNEF positions commanding the Strait of Tiran and therefore access to the Red Sea and southern Israel. Thus the die was cast, and Israel's pre-emptive strike soon followed, touching off a full-scale though short war – the Six Day War of 1967.

The Security Council has frequently looked to UN field missions for immediate information. During the Six Day War, the Council demanded a cease-fire from the warring parties in its Resolution 235 of 9 June 1967 and asked the Secretary-General to “report to the Security Council not later than two hours from now” (para. 3) about the parties' acceptance of a cease-fire, which came the next day. Secretary-General U Thant had employed the UNTSO Chief of Staff to maintain contact with the parties and to keep track of the escalating conflict. The Secretary-General sometimes had to express his regret to the Security Council that he could not meet its information requests because UN observers could not remain stationed in the “hotspots” or were not there to begin with. In addition, member states, including those on the Security Council, were not sharing the intelligence acquired through their secret sources, including surveillance satellites.

After the Six Day War, a victorious Israel denounced the four armistice agreements and the MACs ceased to function effectively. UNEF, which had been withdrawn under Egyptian insistence, was not reinstated. But UNTSO continued to carry out a variety of tasks (including monitoring), with varying degrees of cooperation from the parties. For instance, UNTSO personnel who were stationed in over a dozen observation posts along the Suez Canal reported on the daily exchange of fire across the canal in 1969–1970 – though they were little able to prevent it – in what was known as the “war of attrition”.

UNTSO was able to notify the Secretary-General of the outbreak of the Yom Kippur War (known as such because it began at the time of the Jewish holiday of Yom Kippur) on 6 October 1973, a war that caught both Israel and the United States by surprise. United Nations observers on the Israeli side of the canal were equally surprised when they were quickly overrun by advancing Egyptian forces.

The end of the Yom Kippur War gave rise to the second UN Emergency Force (UNEF II). With that mission, the norm of not using soldiers from the Permanent Five members of the Security Council was ended. To boost the effectiveness of UNEF II, the UN Secretary-General accepted offers of troop contributions from both superpowers: 28 American and 36 Soviet observers were deployed in this operation under the operational control of the Secretary-General.

The first of several Arab–Israeli agreements after the Yom Kippur War was signed on 11 November 1973 at kilometre-marker 101 on the Cairo–Suez road by representatives of the two parties and by the UNEF II Commander, General Ensio P. Siilasvuo of Finland. United Nations peacekeepers began to replace Israeli soldiers at checkpoints. The second agreement, signed a few months later (on 18 January 1974), facilitated a further withdrawal. As Israeli forces withdrew, UNEF II forces were given temporary hold of territory before they handed it over to Egyptian forces.

The Second Sinai Disengagement Agreement (Sinai II, 1975) established a large buffer zone in which military forces were entirely prohibited. In addition, two areas of limited forces and armaments on each side of the buffer zone were created. These zones were monitored by UNEF II and access points to the buffer zone were controlled by UN peacekeepers. The agreement stipulated that UNEF II would carry out an inspection within 24 hours of a request from either party and would promptly furnish both parties with the results of each inspection. The agreement established a Joint Commission to consider any problem arising from the Agreement and to assist UNEF. The Commission met under the chairmanship of General Siilasvuo. A “US Proposal”, attached to the agreement, provided for the establishment of an early warning system in the Giddi and Mitla passes, which were vital crossing points for any large military operations across the Sinai. Unlike the peacekeeping operations, these stations relied heavily on technology, including arrays of ground sensors, as described by Michael Vannoni (1998). The system consisted of three US watch stations and stations on either side operated by Israel and Egypt. In the early warning zone, UNEF provided escorts between the US watch stations and the surveillance stations of the parties. The Sinai II agreement (Annex, Art. 2B) provided that:

At each watch station . . . United States civilian personnel will immediately report to the parties to the basic Agreement and to the United Nations Emergency Force any movement of armed forces, other than the United Nations Emergency Force, into either Pass and any observed preparations for such movement.

In addition, the watch stations sent weekly and monthly summary reports to the parties and the United Nations.

In the reduced forces areas, UNEF II conducted fortnightly inspections, accompanied by liaison officers from the respective parties.⁹ The Force employed a system of checkpoints, over two dozen observation posts and mobile patrols by land to monitor the situation and to intervene in cases of violation. It also kept track of over-flights that might be violations of the agreement. Observation of over-flying aircraft was done by eye (not radar). The Joint Commission received a number of complaints alleging violations but it never became paralysed as did its predecessor, the Egypt–Israel MAC.

In the 1979 Treaty of Peace between Egypt and Israel, the continued stationing of UN forces and observers was envisioned to “supervise the implementation of the security arrangements” (Egypt–Israel 1979). But, because of the opposition of the Soviet Union to the Treaty (in solidarity with the Arab states), it was not possible to get such a force approved by the Security Council. Instead, a Multinational Force and Observers (MFO) was established outside the UN system by a 1981 Protocol to the Treaty to carry out the envisioned tasks. The MFO is funded primarily by the two parties and the United States. The mission, however, employs military and civilian observers and other personnel from over a dozen countries. In accordance with the Protocol, the United States supports the mission by conducting high-altitude surveillance flights to take photographs of the Treaty zones and provides narrative reports of the interpreted raw data to the two parties and the MFO. The United States provides similar assistance to the UN force on the Golan Heights. The technologies employed by this non-UN mission are described later in this chapter.

At the end of the 1973 war, Israel also occupied a portion of Syrian territory: the Golan Heights. UNTSO observers set up cease-fire observation posts at the most salient points in the area but tensions remained high, and artillery, rocket and tank fire intensified in early 1974. In May of that year, Syria and Israel finally signed an Agreement of Disengagement, with a Protocol on the establishment of the United Nations Disengagement Observer Force (UNDOF). The cease-fire and separation of forces were verified by UNDOF. The UN force delineated and marked the lines bounding the area of separation in cooperation with the forces on the two sides and then began its supervision of the demilitarized areas. It continues to do so by means of static positions, 24-hour observation posts and mobile patrols. Fortnightly inspections of the area of limitation of forces are carried out in the 10, 20 and 25 km zones on each side of the area of separation. Liaison officers from the respective party

accompany the UNMOs on their inspections. After an inspection, the findings are simultaneously communicated to both parties but not made public. The United States provides UNDOF with valuable overhead reconnaissance, presumably from satellites, to assist with the detection of vehicles and weapons or troops illegally within the UN-monitored territories. Although UN monitoring has generally proceeded smoothly, both sides have at times placed impediments on the movements of UN personnel.¹⁰

Lebanon

Reliable reporting is a cornerstone of all peacekeeping. Good observation devices are essential.

Lt Gen Gustav Hägglund, UN Force Commander in Lebanon¹¹

On its northern border, Israel had considerable peace until the Palestine Liberation Organization (PLO) developed bases in Lebanon in the mid-1970s. After a PLO commando unit struck near Tel Aviv on 11 March 1978, Israel sent its first invasion force into Lebanon. Within a few days, Israel occupied almost the entire region south of the Litani River, that is, the bottom fifth of the country. The UN Security Council then established the United Nations Interim Force in Lebanon (UNIFIL) on 19 March 1978 “for the purpose of confirming the withdrawal of Israeli forces, restoring international peace and security and assisting the Government of Lebanon in ensuring the return of its effective authority in the area”.¹² As had frequently happened at the creation of a new operation in the Middle East, many of UNIFIL’s initial peacekeepers and commander, Major General Emmanuel A. Erskine, were drawn from UNTSO, which also had several of its own observation posts in Lebanon. Israeli forces withdrew from southern Lebanon by 13 June 1978, as verified by UNIFIL, but the Israel Defense Forces (IDF) turned over most of their positions not to UNIFIL but to the de facto forces of what was later to be called the “South Lebanon Army” (SLA), Christian militias led by Major Saad Haddad, a renegade officer of the Lebanese National Army. To the extent possible, Lebanese gendarmes (internal security forces of the Lebanese government) assisted UNIFIL in its work at checkpoints and in both its security and humanitarian activities.¹³ The situation, however, was not satisfactory, and there was frequent SLA/Israeli fighting with Lebanese government and PLO forces.

A second and larger Israeli invasion occurred in June 1982. UNIFIL attempted to block advancing forces but in most cases was quickly displaced.¹⁴ Israeli forces partially withdrew in 1984–1985 after providing advance notification to both the Lebanese government and the United

Nations. UN forces started patrolling in the vacated areas. However, Israel continued to claim and occupy a “security zone”, a strip varying from 2 km to 20 km along the border. In addition, through the SLA, Israel indirectly controlled a larger area including over 70 military positions. In the area in which it operates, UNIFIL tried to protect civilians and provide humanitarian and medical assistance as well as maintaining checkpoints and observation posts. When Israel withdrew completely from Lebanon in 2000, the United Nations verified its withdrawal.

In 2006, after the capture of two Israeli soldiers by Hezbollah, a 34-day war was fought in Lebanon. The UN peacekeeping operation was greatly strengthened after the end of the war. UNIFIL was tasked with helping the Lebanese army find illegal weapons south of the Litani River. To prevent the introduction of new weapons, the expanded mission included a Maritime Task Force, the United Nations’ first. European countries became major contributors to the mission, bringing a more robust capability with a substantial amount of technology (described in Chapter 8).

Iraq and its neighbours

Iraq initiated costly wars against two of its neighbours: Iran in 1980, and Kuwait one decade later. The actions proved disastrous for Iraq. But the aftermath included the establishment of two UN operations to help foster peace on those two Iraqi borders.¹⁵ The first war, with Iran, lasted eight years, ultimately ending after significant UN mediation. Iraq’s 1990–1991 war lasted nine months, with the actual fighting lasting only 100 days and ending in military defeat for Iraq by a UN-mandated US-led coalition. A peacekeeping operation was forced upon Iraq as a measure to protect Kuwait.

The Iran–Iraq war was extremely brutal, characterized by the use of chemical weapons and “human waves” across battlefields, as well as by barbaric attacks on civilian targets, including missile targeting of cities. The UN Secretary-General was able in 1984 to gain the agreement of both parties to cease temporarily the attacks on purely civilian population centres. He was also able to deploy small inspection teams that were seconded from UNTSO and based in Baghdad and Tehran to verify the undertaking, dubbed the nine-month truce in the “war of the cities”.¹⁶

It was, however, several years before the war-weary parties became serious about peace and accepted proposals from UN Secretary-General Javier Pérez de Cuéllar. Security Council Resolution 598 (1987) of 20 July 1987 was a watershed in UN history, not only because it clearly demonstrated a new cohesion in the Security Council but also because it showed how the Security Council can present a detailed plan for peace that is subsequently accepted (albeit a year later) and carried out by the

parties. In accordance with the resolution, and following the dispatch of an advance technical mission to the area, the United Nations Iran–Iraq Military Observer Group (UNIIMOG) was established on 20 August 1988, the day the cease-fire came into effect. UNIIMOG’s mandate was “to verify, confirm and supervise the cease-fire and withdrawal” of forces. UNIIMOG established the agreed-upon cease-fire lines and supervised the withdrawal to, and confinement behind, internationally recognized boundaries between Iraq and Iran. At its peak, UNIIMOG employed about 400 peacekeepers, including 350 UNMOs. The Secretary-General had planned to employ, as well, several fixed-wing aircraft and a squadron of helicopters for observation and transport. But, because Iraq objected, the United Nations could employ only the helicopters belonging to the two parties, which greatly inhibited their freedom of aerial movement and observation. UNIIMOG covered the cease-fire lines, which extended over 1,400 km of varied terrain, using patrols by foot, vehicle and even mule-back in the mountains. The waterways and marshes between the two countries were also monitored, mostly by boat.

UNIIMOG frequently received complaints of alleged cease-fire violations and investigated nearly all of them. The first nine weeks of the mission saw the greatest number of complaints (1,072) but the frequency declined as the cease-fire stabilized. Although most complaints were relatively minor, such as small arms firings, some violations needed to be addressed urgently, including the establishment of new forward defended locations, the deliberate flooding of plains, the seizure of prisoners and mining in no-man’s land. The allegations of disputed deployments into the other side’s territory were the most serious. Although there was no joint commission to look at and resolve problems, UNIIMOG tried to persuade the parties to return to the status quo, eventually succeeding in most cases. Thanks in part to the strains imposed upon Iraq in the impending 1991 Gulf War, Iraq withdrew from 23 of the 29 disputed locations and Iran withdrew from 13 of 17 such positions. By the time UNIIMOG was withdrawn, the Secretary-General was able to declare with satisfaction that all forces had withdrawn behind internationally recognized lines. UNIIMOG was less successful in arranging an exchange of information about unmarked minefields and creating an area of separation (for example, a demilitarized zone) between the armies. Furthermore, the mission had to be ended because Iran refused to accept a continuation of its mandate, perhaps because Iraq was militarily weak after losing the Gulf War. In view of this, the Secretary-General ended the mission at the end of February 1991.

In contrast to its slow response to the 1980 Iraqi invasion of Iran, the Security Council reacted to the 1990 invasion of Kuwait with great speed and resolve.¹⁷ The first resolution was passed the same day as Iraqi armed

forces crossed into Kuwait. The Security Council condemned the invasion and called for an unconditional withdrawal. After its defeat in the Gulf War, Iraq was made to accept the mammoth Resolution 687 of 3 April 1991, which established the United Nations Iraq–Kuwait Observation Mission (UNIKOM) in addition to other bodies, including the United Nations Special Commission (UNSCOM), which was charged with inspecting and overseeing the disarmament of Iraq’s weapons of mass destruction (WMD).¹⁸ UNIKOM was mandated to monitor a demilitarized zone between the countries, which covered the entire 200 km length of the border to a depth of 10 km on the Iraqi side and 5 km on the Kuwaiti side. It was also tasked with verifying the withdrawal of all parties from the zone.

UNIKOM set up observation posts and checkpoints on the main roads into and out of the DMZ between Iraq and Kuwait to monitor cross-border movements, which had to be declared to UNIKOM in advance by the two sides. UNIKOM also conducted land and air patrols in the DMZ and monitored the Khawr ‘Abd Allah waterway between the two countries. On-shore observation posts were equipped with ground surveillance radar to spot boats moving up the waterway day and night. Patrol boats in the water and planes in the air also helped with the monitoring. DMZ violations were of four main types: incursions by military personnel on the ground; over-flights by military aircraft; police carrying weapons other than personal side arms; and the firing of weapons other than side arms.

UNIKOM was also mandated to observe and report any hostile acts mounted from one side against the other, and did report such an attack when Iraq launched a quick military strike in January 1993 to seek the unauthorized retrieval of Iraqi property from Kuwaiti territory. On receiving the UN Secretary-General’s report (1993c) after the attack, the Council authorized the Secretary-General to further strengthen UNIKOM by adding a mechanized infantry battalion to the 300 military observers already deployed. The new force was not authorized to initiate enforcement action but it could use heavy weapons in self-defence, which was defined to include active resistance to any attempts to prevent by force the mission from carrying out its mandate. The infantry battalion served as a “force mobile reserve” capable of rapid deployment anywhere in the mission area. In practice, the infantry was used to reinforce patrols, to provide security at UNIKOM installations and to act as a deterrent in locations where incidents were deemed likely or possible. During the demarcation of the boundary, UNIKOM witnessed incidents and expressed concerns about the deployment of Iraqi forces north of the DMZ. UNIKOM found itself frequently involved in the detection and prevention of unauthorized border crossings by civilians and the repatriation of individuals. Although there was no joint commission for the

parties to discuss incidents and problems, UNIKOM maintained liaison with both parties at all levels. UNIKOM was unique in several ways, including that all five permanent members of the Council agreed to provide military observers to the operation.¹⁹ After 1994, the number of incidents and violations was limited until US forces entered the demilitarized zone in preparation for the US attack on Iraq in March 2003.

Sophisticated aerial reconnaissance and other technologies were used in the context of a UN field operation in Iraq. However, the mission was not to maintain the peace but to uncover and destroy Iraq's WMD. The UN Special Commission in Iraq, UNSCOM, employed high-flying American U-2 aircraft with wide field-of-view cameras to cover large areas and high-resolution cameras for detailed pictures. Germany supplied three helicopters with hand-held and gyroscopically stabilized photographic equipment capable of providing a ground resolution in centimetres. These helicopters also possess ground-penetrating radar to locate cavities, metal objects and shallow buried wires. Other helicopters are equipped with forward-looking infrared systems for night vision that can also be used to determine whether buildings are in use; these same helicopters also carry gamma-detection equipment to detect and identify nuclear radiation. Suspicious sites identified from the air could be checked by ground teams. Although the crews of these aircraft were nationals of the United States and Germany, UNSCOM had control over when and where they flew (UN Secretary-General 1995: 94). The analysis of the U-2 data was done by UNSCOM personnel in combination with intelligence agencies, including (controversially) Israel's Mossad (Ritter 1999).²⁰ UNSCOM benefited from the support of intelligence agencies but this came at the cost of negatively affecting its impartiality. Its successor, the United Nations Monitoring, Verification and Inspection Commission, was more careful, employing only international civil servants rather than personnel on loan. Large numbers of weapons were destroyed, but neither body could confirm that Iraq was not harbouring any WMD. There was enough residual doubt for the Bush administration to use WMD as the justification for the US-led invasion of Iraq in 2003, although without convincing the Security Council or gaining its authorization.

Non-UN case: Multinational Force and Observers (MFO)

Another mission to benefit from US technology was (and remains) the Multinational Force and Observers (MFO), a multinational (non-UN) force stationed in the Sinai since 1982. Although it has proclaimed itself "low tech by design", it has a strong sense of technological capacity and

uses information drawn from technologies. The creators and current staff of the MFO are well aware of the possibilities for monitoring technologies because the Sinai Field Mission (1975–1979) was deployed in areas they currently patrol, including the Giddi and Mitla passes. The force is strongly US-backed so it retains a keen awareness of the potential for monitoring technology. It recognized its own deficiencies and explained why it was not making more use of sensor technologies. From the MFO's own literature (Multinational Force and Observers 1997), one can find a number of factors:

- the force acts primarily as a “confidence-building measure” in which political symbolism and commitment are most aptly demonstrated by the physical presence of peacekeepers; thus, the emphasis is on a person-intensive mission rather than a technology-intensive one;
- the fortunate existence of a consensual and “low-intensity” environment since the signing of the 1979 Treaty of Peace between Israel and Egypt gives rise to a “minimal expectation of initiation of hostilities between the parties or threats directed at the peacekeepers themselves”; situational awareness is therefore not critical for safety reasons;
- the sophisticated surveillance carried out by the United States using high-altitude over-flights and satellites is done in a manner complementary to the peacekeeping force, though not part of it; so wide-area surveillance need not be carried out;
- advanced national technical means for early warning and intelligence are retained by the parties, especially Israel, and they rely primarily on these, rather than on the MFO;
- the main funders (the parties) have “fostered aggressive management cost-cutting” and a push for a steadily declining budget; the main management achievements over the period 1988–1996 are listed as decreases in the budget (–33 per cent), in personnel (–21 per cent), in the aircraft fleet (–50 per cent) and in the vehicle fleet (–44 per cent). In such an environment, any large new budget item would need to be justified as a necessity, not a convenience.

In traditional UN operations most of these conditions also apply, including inadequacy of funding, but in multidimensional operations they are much less pertinent. The intensity of conflict or tension between the parties in areas of modern UN operations and the threat level to peacekeepers in general are much higher. Unfortunately, the United States has rarely backed up a UN mission with the kind of continuous surveillance and intelligence support that it has provided to the MFO. Finally, the parties monitored in most UN operations do not have the kind of early warning capability possessed by the Israelis and the Egyptians. Thus, the fact that the MFO is, like the United Nations, at present personpower

Table 6.2 Technologies employed by the Multinational Force and Observers

Device	Manufacturer	Code
Night-vision devices		
Goggles	Universal Audio Visual	AN/PVS 5-A
Scope	Optic Electronic	AN/NVS 900
Scope	Arab International Optronics	AN/NVS 700
Scope	Questar 89	
Scope	Varo Inc. Electron Devices	AN/PVS 502
Global Positioning System		
Magellan Global receiver	Trimble Navigation	M/NAV 1000 M5 Trim Pac 2
<i>Radar</i> Nautical radar	Racal Decca	BT-502
Ground surveillance radar	US Army owned	AN/PPS-5
Explosive Ordnance Disposal Detachment (US Army owned equipment)		
Mine detector	Poland Industries	AN/PSS-11 (for depths to 18 in.)
Mine detector	Foerster Instruments	MK-26 (for depths to 6 ft)
Mine detector, radiographic (portable X-ray)	Golden Engineering	MK 26
EOD robot	Remotec	ANDROS MK 5
GPS global receiver	Trimble Navigation	Trim Pac 2
Emergency locator beacon		
Radio set	ACR Electronics	AN/PRC 90-2

Source: Selected equipment listed in Multinational Force and Observers (1997: 9).

intensive and not technology intensive does not obviate the many reasons why monitoring technologies are useful in modern UN operations, especially as technology costs continue to decrease and capabilities increase.

The MFO is quick to point out that, in its case, “low tech does not mean no tech”. It has employed a variety of technologies, as listed in Table 6.2, even in the 1990s. Night-vision devices, purchased from the US Army and commercial sources, are of the second-generation type and have been used primarily for site protection. Radar is used on Italian vessels to assist in the monitoring of the Gulf of Aqaba and the Strait of Tiran. Because the Sinai is awash with landmines, detection equipment is essential. The MFO uses both conventional metal detectors and a radiographic (X-ray) detector. Global Positioning System (GPS) is an obvious utility as peacekeepers move about the barren desert, where there are few permanent landmarks and waypoints. The Explosive Ordnance Dis-

posal Detachment (EOD) uses GPS to assist in providing coordinates of hazardous locations. EOD also employs a robot, owned by the US Army, for the disposal of landmines and explosive ordinance, which is frequently brought to the MFO camps by local Bedouin for safe disposal.

The MFO maintains the general policy that it should own the equipment it actively uses, except in cases of weapons and capital assets such as aircraft. In addition, specialized equipment is sometimes obtained on loan from the United States. Through ownership, the MFO can guarantee interoperability and standardization in its equipment. This approach also helps provide cohesion and unity in the force and eases training. The benefits for the United Nations of such a policy would be the same.

The MFO concludes in its 1997 report: "In a world of quickening technological changes, improved and new technologies may well be of service to peacekeepers if they meet the tests of propriety, practicability and affordability. As noted there is limited information and opportunity for interested peacekeeping professionals and those who will be the architects of new peacekeeping mandates to pursue these topics" (Multinational Force and Observers 1997: 8). The present book is an attempt to help fulfil this need.

In the twenty-first century, two missions in the Middle East exhibited some technological innovation: UNIFIL and the United Nations Peacekeeping Force in Cyprus (UNFICYP). In particular, UNFICYP deployed cameras for remote viewing after a reduction in personnel was forced upon it. This shows that in peacekeeping, as in life, necessity is the mother of invention. The Cyprus case is worth considering in detail because of the lessons to be learned from its pioneering initiative.

Cyprus: Tradition meets modernity

In February 2008, UNFICYP became the first UN mission to use remote unmanned cameras (closed-circuit television, or CCTV) to monitor conflict areas.²¹ Other missions had used CCTV for security around UN buildings and similar purposes, but not to monitor a tense zone between armed opposing forces. As a quintessential traditional peacekeeping operation, UNFICYP was an unlikely pioneer in monitoring technology, but this success story is worth considering in detail.

UNFICYP was created on 4 March 1964²² to quell fighting between Greek and Turkish communities in areas across Cyprus, an island that is considered part of both the Middle East and Europe. UNFICYP divided the island into seven sectors. The UN force focused on places where Greek and Turkish communities were clashing. The capital, Nicosia, was an area of heavy fighting that quickly became split between the Greek

and Turkish Cypriot sides. The division in Nicosia was characterized by a “Green Line”, a term derived from the colour of the line drawn on a map of a British general showing the positions of the two sides. Gradually, UNFICYP restored stability and by May 1974 it was able to reduce its original 1964 strength of 6,411 to 2,341 personnel.²³ Sadly, this glimmer of hope was short-lived.

In July 1974 a sudden coup d'état by Greek Cypriot National Guard forces advocating *enosis*, or the union of Cyprus with Greece, triggered an invasion from Turkey in support of the Turkish minority. The war caused massive displacement of peoples, in effect dividing Cyprus in two, with Turkey controlling the northern third and the Greek Cypriots controlling the southern two-thirds. The war extended the “Green Line” across the entire island from east to west, spanning 180 km and separating heavily armed opposing forces (OPFORs) that faced each other across a buffer zone ranging in width from 7 km in rural areas to a few metres in Nicosia. Constant UN control of this buffer zone became crucial to prevent aggressive moves forward by either side. Patrolling continued to play an important role, as before the 1974 war, but now it was focused entirely on the Green Line as opposed to the areas in Cyprus where Greeks and Turks had lived in close proximity. Such areas were no longer “hotspots”, in part because the war had triggered a massive population redistribution that left the south of Cyprus almost entirely Greek and the north entirely Turkish.²⁴ Volatility in the buffer zone required UNFICYP not only to patrol vigorously but also to erect and permanently occupy a long string of observation posts (OPs).

OPs proliferated after the 1974 war because they played a crucial role in UNFICYP's monitoring function along the buffer zone. UNFICYP delineated forward positions of the opposing forces at the cessation of hostilities and strove to maintain these adjacent cease-fire lines. This involved detecting and if possible preventing moves forward by either side. Clearly the advantage of OPs over patrols was that they achieved constant surveillance of a segment of the buffer zone, making it possible to immediately detect a move forward within sight of the post. The OPs also helped to enhance stability. Especially during the aftermath of the 1974 war, there were many areas along the Green Line where shouting, rock throwing and shooting incidents between the opposing forces occurred frequently. To have several “shot” (firing) reports a day in the Canadian area of responsibility (Sector 3, which included Nicosia) was not uncommon. Areas of such sensitivity required a constant “Blue Beret presence” to prevent escalation from shouting to shooting. Even with the presence of a UN post, however, it was not uncommon for the small group of UN soldiers at the post to be unable to contain a difficult situation. They would have to call a UN patrol to the area to help restore stability. The

constant monitoring and pacification carried out by permanently manned OPs all along the Green Line were indispensable after the 1974 war. By June 1975, UNFICYP had 148 OPs (UN Secretary-General 1975: 6) and the OP tradition had become a dominant aspect of the force's *modus operandi*.

Although this style of peacekeeping proved successful, the peace-making – or negotiation of a settlement – was painstakingly slow and a political solution remained elusive. Frustrated with this slow progress, several countries in the early 1990s, including the major troop contributor Canada, announced that they would withdraw or significantly reduce their contributions to UNFICYP. This prompted the Secretary-General to warn that UNFICYP would cease to be viable by June 1993 without new contributors (UN Secretary-General 1993a: 2). The strength of the force's military component fell from 2,040 in November 1992 to below 1,000 in mid-June 1993 and the Force Commander had to implement an emergency contingency plan that was to have a significant impact on the future of UN monitoring in Cyprus.

On 1 December 1992, UNFICYP's military component consisted of 2,040 troops manning 151 OPs, of which 51 were permanently (that is, constantly) manned (UN Secretary-General 1992: 3–5). Six months later, only 37 OPs were permanently manned. This reduction of 14 permanently manned observation posts was necessitated by a drop of 570 military personnel, bringing UNFICYP's strength to 1,470 (UN Secretary-General 1993b: 2–4). Only two weeks later, in mid-June 1993, the strength of UNFICYP dipped to below 1,000 (UN Secretary-General 1993a: 2) and the number of permanently manned OPs was again reduced – this time by 16 – leaving only 21 posts permanently manned.²⁵ Even after the force level was increased thanks to Argentina's offer of a line battalion of 375 troops, raising the strength of UNFICYP to 1,168 personnel by November 1993 (UN Secretary-General 1993d: 7),²⁶ the OP manning levels were not increased to their previous levels (UN Secretary-General 1993d: 4).

UNFICYP learned from the force reduction experience imposed on it in 1993 that there was no need to permanently occupy so many OPs to maintain stability. UNFICYP began to place greater emphasis on *patrolling* as a means of monitoring, as well as housing its military personnel within the buffer zone itself. The situation in Cyprus had grown more stable, allowing the operational transition to fewer constantly manned observation posts. Thus the mission learned a lesson in 1993 on ways to substitute for permanently manned OPs, a practice it would consider again over a decade later.

In 2004, after a breakthrough in negotiations, UN Secretary-General Kofi Annan presented a *Comprehensive Settlement of the Cyprus Problem*,

or the Annan Plan (UNFICYP 2004a), to both Cypriot communities for approval by referendums. The Turkish Cypriots accepted it by a margin of almost two to one, but the Greek Cypriots rejected it by three to one.²⁷

This rejection of the Annan Plan by the Greek side precipitated a dramatic change in UNFICYP. Given the collapse of peacemaking, Secretary-General Annan initiated a review of peacekeeping in the country. Based on the findings of the review team, he recommended a one-third reduction in the military component of UNFICYP from 1,224 to 860 personnel. He observed that the security situation on the island had become “increasingly benign over the past few years” and that a recurrence of fighting was “increasingly unlikely” (UN Secretary-General 2005). An adjustment in the force’s approach to monitoring, observation and surveillance was envisaged in the Secretary-General’s Report of 24 September 2004:

A further shift in emphasis from *static to mobile surveillance* would be appropriate at this stage, resulting in savings in personnel and resources. Better use of *technology* could also improve the Force’s effectiveness, including closed circuit television and improvement in information technology. Additional helicopter hours would also be required. (UN Secretary-General 2004: 7, emphasis added)

This new Concept of Operations, termed “concentration with mobility”, was opposed by the Greek Cypriot government, which argued that the military situation had not changed and that UNFICYP was already thinly spread on the ground (Ker-Lindsay 2006: 413). Nevertheless, the Security Council, by its Resolution 1568 of 22 October 2004, accepted the Secretary-General’s recommendations and by February 2005 the force level was reduced by 300 military personnel. The Force Commander, Major General Herbert Figoli of Uruguay, enunciated a plan to deal with this downsizing or operational challenge, which he entitled the “UNFICYP 860 Concept of Operations”, or “Force 860” for short. He wrote:

I intend to place less reliance on static observation posts and to shift our emphasis to more mobile surveillance. Increased patrolling on the ground and in the air, combined with *greater use of technology such as closed circuit television*, will enhance the monitoring activity of the force. Patrol programs will be more efficiently directed to areas where presence is needed, rather than routine patrolling everywhere. I am prepared to accept some risk in quiet areas. (Figoli 2004: 1, emphasis added)

The successful transition to a smaller force demonstrated the creativity of UNFICYP’s leaders and the professionalism of its peacekeepers.²⁸ Under the new concept, the average number of daily patrols rose from

about 50 to 200 between February and April 2005. The number of permanently manned OPs was reduced from 17 to merely 2. Patrol bases were reduced from 21 to 9 and UN camps decreased from 12 to 4 (UN Secretary-General 2005: 4).

The technological contribution: Closed-circuit television

The plan was to introduce “greater use of technology such as closed circuit television” (Figoli 2004: 1) to monitor areas considered “hotspots”. Motion-initiated camera systems “would produce the necessary evidence to prove to the OPFORs the UN’s allegations of [OPFOR] ill discipline which to date have been denied by the OPFORs because of the lack of corroborative evidence” (UNFICYP 2004b: 1, paras 1–4).

Table 6.3 is my estimate of the cost of a manned versus camera-based OP.²⁹ It is based on UN and UNFICYP cost figures for personnel and the actual CCTV system deployed with a remotely controlled camera. Rounded numbers and US dollars are used for this estimate.

The total cost for one manned OP is estimated at about \$170,000 per year, whereas the cost for a camera system is roughly \$15,000 in the first year and \$160 for subsequent years. Thus, a camera system is over 10 times cheaper in the first year and 100 times cheaper in subsequent years. With more substitutions, the cost savings would be that much greater. However, if a large number of cameras is deployed (for example, more than a half-dozen), additional watchkeeper(s) would be needed in the Joint Operations Centre (JOC) to keep an eye on the additional screens. Roughly one watchkeeper is required for every half-dozen cameras. Still, the personnel requirements for additional watchkeepers would be far lower than for human observers at additional OPs.

Financial and personnel requirements are not the only consideration in a manned/unmanned comparison. The loss of the human presence in the immediate conflict zone is a significant drawback, although it was a necessary trade-off in UNFICYP’s case.

In a camera-based system with no local human presence, the United Nations needed to be responsive. After a violation is spotted by the watch officer in the JOC, a call is made to the OPFORs’ local liaison officer, ideally as soon as the violation occurs. For more serious violations, the mission’s liaison officers or response forces are on standby to achieve a quick response. The response force is closely linked to the JOC, which can provide live information and guidance.

It took UNFICYP several years to implement the camera plan. The initial concept and the Statement of Requirement (UNFICYP 2004b: 2; 2005) envisaged surveillance of 10 “flashpoints” in the Nicosia city centre, using 16 cameras equipped with infrared filters, transmitter-receivers and,

Table 6.3 Cost estimates for manned versus unmanned observation posts

Components	Costs	Comments
Manned OP		
Personnel: 8 (2 persons/shift × 3 shifts + 2 persons on leave/medical)	\$96,000 (8 × \$1,000 × 12 months)	UN pays troop-contributing countries \$1,024/month for each soldier (specialists more)
Welfare, rations	\$73,000 (25/day × 8 persons × 365 days)	\$9,125/year/person
Binoculars and night-vision goggles	\$2,500 (26/month × 8 persons × 12)	\$26/month from COE Manual (observation and identification)
<i>Total</i>	\$171,500 per year	
Unmanned OP		
Camera: 1 (purchase and installation)	\$15,000	Based on UNFICYP contract for one camera to replace each OP. Includes camera, link to control station and maintenance for one year. For some positions, two or more cameras might be needed in future
Maintenance (after first year)	\$150	Based on a five-year maintenance contract
Electrical costs	\$10	Negligible in cost for posts near electrical sources (as in UNFICYP)
Staff	0	No additional staff employed at the Joint Operations Centre to view the six or so cameras equipped with motion sensors
<i>Total</i>	\$15,010 for first year \$160 for following years	Contract for five years

at the JOC, a multiplexer, large monitor and DVD recorder. Six cameras were finally installed in the buffer zone by contractor personnel under UN escort in February 2008. The JOC equipment was installed at the same time. The Standard Operating Procedures for the camera system were developed that year (UNFICYP 2008b).

The United Nations chose sensitive areas of the buffer zone to deploy the cameras in parts of Nicosia's city centre where the OPFORs were closest and where violations had been most frequent. The camera system was spread over 1.5 km along the narrowest part of the Green Line. This

area, in the centre of crowded Nicosia, is a no-man's land, providing stark evidence of the 1974 war. Majestic but uninhabited and decaying buildings, some pocked with bullet holes, remain frozen in time, an eerie reminder of the intense fighting that brought a once bustling city centre to a dead halt.

The camera system had to be secure, even though there were few intruders along this demilitarized strip. The camera domes were made of vandal-proof (though not bullet-proof) plastic. The United Nations also stipulated that the data stream had to be secure. The contractor³⁰ used microwave communications to connect the cameras to the JOC of Sector 2, manned by soldiers of the British contingent. The Pan Tilt Zoom cameras incorporated a motion sensor, so that movements within the camera's field of view could be highlighted for the watch officer.

Once installed, it was important for the camera concept to succeed that the OPFORs not resist the new system. The UNFICYP Commander who developed the concept in 2004 had already explained its utility to his senior OPFOR counterparts. Then, when the system was made operational, the Commander, in whose downtown area of responsibility the cameras were installed, also invited the local commanders to separately visit the JOC for a briefing on the system and to view it first-hand (Duncan 2008a). The two half-hour visits were successful, with no opposition coming from the parties.

CCTV in practice

The utility of the camera system was quickly demonstrated in the first few months after its installation. Many "serious" violations were spotted almost immediately. Two cases illustrate the functioning of the camera system.

Greek National Guard Post 50 (NG50)

Soon after a UN camera was installed near NG50, the JOC watch officer observed Greek National Guard soldiers, some armed with rifles, inside the buffer zone.³¹ The dispatch of a peacekeeper led to the departure of the National Guard soldiers. The UNFICYP Sector 2 Commanding Officer wrote to his National Guard counterpart that the violation had been "captured on CCTV". He requested a National Guard investigation and explanation, adding: "I am sure you would agree that had this event been observed by the TK [Turkish Forces], a very serious situation could have resulted" (Duncan 2008b).³² The Guard commander agreed that the soldiers had gone out of the prescribed areas. He assured the United Nations officer that he had re-issued "clear orders" to his soldiers to avoid a repeat of this specific incident. Overall, violations at NG50

“decreased dramatically since the introduction of the CCTV camera”. Previously, though, “the UN had no way of observing a violation unless a patrol happened to stumble across it happening”.³³

Ledra Street Crossing

Ledra Street runs through the centre of Nicosia’s old city. It was the first street to be barricaded when inter-communal fighting broke out in December 1963. Then, after the 1974 invasion and partition, it became the dividing line in the city centre and was the site of much OPFOR antagonism and grandstanding. After a thaw in relations in 2007–2008, a public transit point was opened at the Ledra Street Crossing (LSX).³⁴ The public opening in April 2008 was a symbolic victory for peaceful coexistence. Moreover, the LSX gained great practical value by facilitating traffic between the Turkish and Greek zones of the island’s largest city. Nevertheless, the first days of the opening presented significant challenges for the United Nations.

On the morning of its opening on 3 April, the crossing was still contentious. The Turkish Republic of Northern Cyprus maintained that most of the crossing area was in its territory and insisted on a right to enter. This fact was disputed by the United Nations, which insisted that, as part of the agreed confidence-building measures, the crossing area was to be demilitarized, that is, unmanned by any forces. The United Nations’ video camera was installed above the centre of the crossing. The CCTV showed Turkish Cypriot Police (TCP) officers entering the area before the opening of the crossing. Such trespassing was to repeat itself, but, according to the UNFICYP soldier who watched the CCTV tapes, “once the TCP realised that the camera was watching over this area for violations, the offenses became almost non-existent”.³⁵

CCTV problems and limitations

Although UNFICYP has pioneered CCTV observation of conflict areas, the actual system in Nicosia took years to be implemented and the area coverage is still quite modest. Whereas 100 cameras are used for monitoring UN premises, only 6 are used for hotspots along 1.5 km of the Green Line. Furthermore, one of the six cameras remained non-functional for a half year after installation owing to a communications-relay problem.

Microwave beams are used to transmit the signals from the existing camera stations to the Sector 2 Operations Centre. Sometimes, because of tree foliage along the route, the microwave signal from a camera becomes disrupted or the video link is lost or its quality degraded.³⁶

Another problem is that the OPFORs do not tolerate filming behind their cease-fire lines. Thus the current CCTVs must be pointed across the

breadth of the buffer zone and the view of the cease-fire line must be limited to forward positions only.

If the conflict intensity between the OPFORs had been higher, it is unlikely that CCTV systems could have been used to replace observation posts completely. Clearly, the relatively peaceful atmosphere made possible the technological component of the “concentration with mobility” concept. When the Green Line had seen more violence, for example the shooting incidents of the 1970s and 1980s, the opposing forces would likely not have tolerated the installation of cameras and might even have destroyed them with gunfire. Adversaries firing bullets at each other are unlikely to want a video witness to their actions. For the United Nations, however, a combination of both technology and peacekeepers allows the benefits of both to be leveraged. Technology could serve as a force multiplier. In a hostile situation, peacekeepers could providing the human eyes and the cameras could provide the evidence for later.

Helicopter reconnaissance

Aerial observation is a highly effective monitoring tool that was already in UNFICYP use before the introduction of “Force 860”. The Argentine helicopter unit “UN Flight”, based at the former Nicosia International Airport, took observers on flights 24/7 upon request from the sectors. Helicopters provide a “bird’s eye” view of the terrain³⁷ and are also equipped with a surveillance pod housing electro-optical and forward-looking infrared (FLIR) cameras that can take gyro-stabilized video footage day and night.³⁸

Camera imagery from helicopter flights has been given to the parties as reliable and impartial evidence of violations. Digital cameras held by peacekeepers on helicopters have recorded evidence of violations such as: unannounced military exercises and terrain briefings; illegal road/fortification construction, farming, hunting and motor-biking; and suspicious activities needing further investigation on the ground. Air patrols have also viewed other activities, including ships of doubtful origin off the Cypriot coast, public demonstrations in Nicosia and even lost UN patrol cars.

Lessons from UNFICYP

As a stereotypical “traditional” peacekeeping mission, UNFICYP was an unlikely candidate to deploy surveillance technology. Yet tradition met modernity in the UNFICYP mission, whose innovative actions were borne of necessity as it was forced to downsize after 2004. The adaptive actions were pioneering. Unattended camera systems at hotspots in a

demilitarized zone were introduced for the first time in UN peacekeeping history.

Though it took four years to implement the creative CCTV solution in Cyprus, the utility and cost-effectiveness of fixed video cameras in conflict zones have been clearly shown by the UNFICYP experience. The examples described above highlight the significant advantages of cameras, especially to record violations and present evidence to offending parties. In addition, cameras can maintain a 24-hour watch, whereas patrols can observe violations only if they happen to be there at the time.

Manned observation posts allow for a constant watch and may permit a quicker response because some soldiers are already *in situ*. Under the “concentration with mobility” concept, responders are kept on standby at some distance. This sacrifice of reaction time is compensated for by the greater mobility of forces and reduced cost. As a rough rule of thumb, a camera system is 10 to 100 times less costly than a manned OP.

As shown in UNFICYP, cameras can incorporate motion detectors that trigger alarms and watchkeeper attention. Even more sophisticated hardware and software are available to spot potential violations. Furthermore, the cameras can be equipped with acoustic recorders to catch violations such as the shouting of verbal abuse that might result in an escalation of conflict. In addition, the United Nations could set up speakers to address the parties from the Joint Operations Centre for an immediate verbal response to violence.

In Cyprus, the level of violations is low in comparison with other missions. UNFICYP catches 600 or so violations a year,³⁹ but none have proved life threatening for over a decade. The daily body count in some UN mission areas exceeds the daily count of violations in Cyprus. All the more reason that the UNFICYP experiment with surveillance cameras carries a valuable and transferrable lesson: remote monitoring can help deter, detect and document violations and prevent the death of civilians and peacekeepers. In larger missions, where the stakes are greater, the benefits of early warning and rapid response are even greater. The United Nations would be wise to develop the positive lessons from UNFICYP into broader policies and wider practices.⁴⁰ In an age when technology has been widely used to enhance war-fighting, it is only appropriate to make greater use of technology for peacekeeping.

Generalizations on monitoring in traditional peacekeeping

From this sweep through the history of peacekeeping operations in the Middle East, several relevant features can be identified:

- all missions gained the initial consent of the host state prior to the deployment of the force;
- monitoring was a key task of all missions;
- almost all UN monitoring was done in accordance with a cease-fire or peace agreement between the conflicting parties;
- most agreements set up bodies (joint commissions) of the parties to deal with observed violations and anomalies in implementation, with the United Nations often serving as the chair;
- the degree of access and cooperation varied considerably between missions and between parties;
- within most missions, the degree of success varied over time.

The survey of these missions reveals that technology was little used in the traditional missions, except in recent times by UNFICYP and UNIFIL. The human eye, sometimes aided by binoculars, was the primary instrument of surveillance for decades in traditional peacekeeping. The many challenges facing the mission were described.

A review of the wider peacekeeping history also reveals many monitoring failures, some of which could have been avoided had the United Nations possessed better monitoring systems and superior technological means. Failures of early warning occurred in places where the UN forces were stationed, including: the 1973 Yom Kippur War, the 1982 Israeli invasion of Lebanon and the 1990 invasion of Kuwait. The outbreak of the 1950 Korean War is another classic example in UN history where aerial monitoring could have been extremely useful.⁴¹ The lack of monitoring capability also contributed to UN peacekeeping failures and weaknesses in Lebanon (1958), the Congo (1960–1964),⁴² Namibia (1989–1990, especially in early April 1989), Rwanda (1994) and Eastern Zaire (1995–1996 during the aborted peacekeeping operation). Did modern multidimensional missions do better? The large number of peacekeeping missions in the twenty-first century provide colourful examples of both successes and failures in the field. They also highlight the use of some modern technologies in the field.

Notes

1. The current missions in the Middle East are the United Nations Truce Supervision Organization, the United Nations Peacekeeping Force in Cyprus, the United Nations Disengagement Observer Force and the United Nations Interim Force in Lebanon.
2. Except where otherwise noted, the information is taken from United Nations (1996).
3. In the early 1960s, David W. Wainhouse prepared, for the United States Arms Control and Disarmament Agency, a thorough description of the field monitoring operations belonging to the United Nations as well as to the League of Nations, the Organization of

- American States, the Organization of African Unity and other international organizations. His results were published in the monumental work by Wainhouse (1966).
4. The first head, Count Folke Bernadotte, was assassinated by an Israeli terrorist group in Jerusalem on 17 September 1948. After his death, the Chief of Staff became the military head of UNTSO. The tradition of calling the head of UNTSO the Chief of Staff continues to this day.
 5. General E. L. M. Burns of Canada, who served as UNTSO Chief of Staff, commented: "Unfortunately, both sides were only too ready to charge partiality or prejudice against senior personnel of the UNTSO when an adverse decision was given, especially when the case was one in which much blood has been spilled, and emotions were aroused. Allowances have to be made for such emotions, otherwise it would be intolerable for officers to have their honor impugned by assertions in the Press that they had made decisions to curry favour with one side or another in order to 'hold on to their jobs.' Chairmen of MACs in particular have often been attacked like this and, in the cases that come within my knowledge, always unjustly" (Burns 1962: 46).
 6. On 14 September 1956, about a month before the 1956 war began, General Burns wrote to UN Secretary-General Dag Hammarskjöld to warn him that "if hostilities between the disputants in the Suez Canal question should break out, Israel . . . might provoke a situation where she could attack in the El Arish-El Quseima-Rafah area". Still the exact timing of the Israeli invasion of Egypt on 29 October caught the UNTSO Chief of Staff off guard. Even the mobilization of the Israel Defense Forces on 27 October (along with a deceptive cover story) and UNMO reports of increased Israeli activity were not sufficient indicators. It was not until General Burns was on his way for a swim in the ocean that he noticed first hand "signs of mobilization beyond anything previously seen". On the morning of 29 October, he warned the UN Secretary-General that unrestricted warfare might begin, as it did that evening. The first confirmatory news was from an UNMO who had been forcibly expelled from his observation post. As fighting intensified, all but essential UNTSO personnel were evacuated (Burns 1962: 178-179).
 7. The background to the conflict is as follows: Egyptian President Gamal Abdel Nasser nationalized the Suez Canal and escalated the conflict in July 1956. France, the United Kingdom and Israel plotted a course of military action. On 29 October, Israeli forces began invading Egypt across the Sinai Peninsula. The next day, France and the United Kingdom issued an ultimatum to both Egypt and Israel to withdraw their forces 10 miles from each side of the Canal. Israel, whose forces had not yet reached that point, accepted, but Egypt refused. Then France and the United Kingdom deployed their forces with the declared intent "to separate the belligerents", which the world immediately recognized as a thinly veiled plot to gain control of the Suez Canal. The United States opposed the intervention by the former colonial powers. The Security Council was deadlocked. This is when Canadian diplomat Lester Pearson made his proposal for a UN force that helped de-escalate the situation.
 8. Under-Secretary-General Ralph Bunche deemed the 0240 hrs cable of 5 June 1967 expedient enough to wake the Secretary-General at his home in order to tell him the UNEF Commander's news: several Israeli aircraft had violated the airspace of the United Arab Republic (UAR); heavy fighting was reported by UNEF personnel in Rafah camp; the UAR authorities had informed the UNEF Commander of a large-scale Israeli air raid throughout the UAR.
 9. The Treaty provides that UNEF "will conduct inspections in order to ensure the maintenance of the agreed limitations within these areas" (Article III(2)(b) of the Protocol of 10 October 1975, which forms an integral part of the Sinai II agreement).
 10. For instance, Israel prevented the movement of a Polish unit on the Israeli side because Poland had no diplomatic relations with Israel. This was objected to by the Force

Commander, as were all infringements on UNMO freedom of movement, but it was not until after the establishment of diplomatic relations between Poland and Israel that the problem was resolved. See United Nations (1996: 80).

11. Quoted in Bash (1995: 66).
12. Security Council Resolution 425 (1978) of 19 March 1978, para. 3.
13. UNIFIL found the gendarmes especially helpful as interpreters and liaison officers with the local population. The gendarmes were also responsible for investigating and handling civil offences reported to UNIFIL.
14. Nepalese peacekeepers guarding the Khardala bridge refused to relinquish their posts and defences for two days. Only after partially destroying the steadfast Nepalese position could Israeli tanks cross the bridge. See United Nations (1996: 101).
15. After the end of the Gulf War, Iraq was made to accept the findings of an Iraq–Kuwait Boundary Demarcation Commission, which based its 1993 final report on a 1963 treaty between the two countries.
16. This was an innovative use of UN military observers during the actual conduct of a war. UNTSO observers were stationed in the capitals of Iran and Iraq to observe the moratorium arranged by the Secretary-General on military attacks against civilian centres (UN Secretary-General 1984).
17. The UN Security Council did not take up the question of the 1980 Iraqi invasion against Iran for over a month, and then only at the urging of the Secretary-General, whereas within a month of the Kuwait invasion it had passed a series of half-a-dozen resolutions, the first one coming in less than a day. Furthermore, after the 1980 attack the Security Council refused to identify Iraq as the aggressor. Presumably, the negative image of Iran held by the international community (especially the United States) following the seizure of the US embassy in Tehran in 1989 was to blame for the erstwhile (and undeserved) favouritism.
18. The other two missions were the Iraq–Kuwait Boundary Demarcation Commission, which oversaw the delineation of the border between the two countries, and the United Nations Compensation Fund, which was created to administer compensation (to be obtained from Iraq) to those who suffered direct losses from Iraq's illegal actions.
19. There are a number of features in the establishment of UNIKOM that suggest how stronger peacekeeping missions might be created in the future (when the Council members give their full support to a mission). First, the mission was created for an indefinite period, not requiring the traditional six-month extensions, when the Secretary-General usually has to justify the mission mandate to an often sceptical Council. Secondly, the mission could not be ended unilaterally by the host states. It would require the concurrence of all permanent members of the Council to terminate the mission. Thirdly, the Security Council encouraged the Secretary-General to consider the need for rapid reinforcements in emergency contexts.
20. The fact that U-2 aircraft images were passed to the Israel intelligence agency was confirmed in my meeting with UNSCOM Chairman (1991–1996) Rolf Ekeus in The Hague on 17 April 2009.
21. This chapter draws heavily from a more detailed study made by A. Walter Dorn and Robert Pauk (2011). Pauk served as a peacekeeper in Cyprus and a consultant and research assistant on the Monitoring Technology project that made this book possible.
22. UNFICYP was created by Security Council Resolution 186 (1964).
23. The first figure is for June 1964 and is from UN Secretary-General (1964: 2). The second figure is for May 1974 and is from UN Secretary-General (1974: 4).
24. UNFICYP estimates that 165,000 Greek Cypriots fled the newly created northern Turkish sector for the southern Greek-controlled territory and 45,000 Turkish Cypriots left the southern Greek sector for the Turkish north. The United Nations High

- Commissioner for Refugees gives slightly higher figures of 200,000 and 65,000 respectively. See the Internal Displacement Monitoring Centre website, at <<http://www.internal-displacement.org>> (accessed 11 January 2011).
25. Only 21 OPs remained permanently manned, another 3 were manned during daylight hours only, and another 19 were manned periodically. All of these were used for over-night accommodation of UNFICYP military personnel. (UN Secretary-General 1993d: 4)
 26. The Security Council changed the financing of the force, which precipitated Argentina's offer.
 27. There was much bitterness over this outcome, especially since the Greek Cypriot President, Tassos Papadopoulos, had campaigned against acceptance. His government had not even allowed some key supporters of the plan to appear on the national television station. See Ker-Lindsay (2005: 118; 2006: 412).
 28. It should be noted that in March 1993, in the face of an impending manning shortfall, the Secretary-General had warned that, if the force fell to 850 personnel, it would cease to be viable (UN Secretary-General 1993a: 2).
 29. The UNFICYP Force Signals Officer (J6), Lieutenant Commander Alberto Cohen, helped develop this table while I was on a DPKO-sponsored visit to UNFICYP in January 2009. His help and insight are much appreciated.
 30. The contractor was the Nicosian firm City Watch Security Systems. The camera specifications to which the contractor agreed are: horizontal resolution of 480 lines for colour imaging and 570 in B/W mode (especially for night operation); 30 frames per second; 4× optical zoom; motion detection/activation and tracking facility; electronic map showing positions of cameras; watchdog function for operating system failure and a universal power supply.
 31. The Greek National Guard troops are not permitted to loiter in the buffer zone, but at certain spots National Guard sentries can pass through the zone briefly to reach another National Guard post. This was allowed in order for the National Guard sentries to avoid civilian houses and lanes while carrying weapons and live ammunition. The UN agreement grants this right of transit in small groups only. Rifles can be carried but not fitted with magazines or bayonets (UNFICYP 2008a).
 32. In 1983, a Cypriot National Guard soldier was shot dead by the Turkish Forces near the post and Friezenburg House. Throughout the rest of 1983, the United Nations observed incidents of the two sides shooting at each other's OPs.
 33. Electronic communication to me from WO2 Provan, Continuity Operations Warrant Officer at Sector 2 Headquarters, Wolseley Barracks, 22 January 2009.
 34. On the Turkish side of the crossing, documents (for example passports) must be presented to border control agents. On the Greek Cypriot side, no stop is required since the Republic of Cyprus sees Cyprus as one country and the border as artificial and not legal or officially recognized. Some Greek Cypriots feared the opening of the crossing might increase acceptance of two separate states within the federal boundaries of the Republic of Cyprus.
 35. Electronic communication from WO2 Provan, 22 January 2009.
 36. The United Nations was unable to trim or remove the offending tree in this particular instance because it forms part of the Turkish Forces' cease-fire line and permission was not given. In addition, the camera was put out of action owing to a power surge from a lightning strike on a building nearby. Written communication from WO2 D. A. Provan, UNFICYP Sector 2, 23 January 2009.
 37. "UN Flight" has Bell 212-IFR and Hughes 500D helicopters, based at the United Nations Protected Area helicopter landing site. The Argentine unit has flown over 15,000 hours since 1974. It usually flies at an altitude of 200–400 metres. A helicopter can fly

- from one end of the buffer zone to the other in under two hours. Planned UNFICYP II requirements listed that the aerial units should have the “capability to serve two separate areas simultaneously with basic FLIR for surveillance”. The surveillance safe range was specified as “5 km [distant] or 3,000 feet above ground level”.
38. The Inframetrics camera pod was brought to “UN Flight” in 2003–2004. The pod has a 7× zoom capability and its imagery is recorded on super-8 film. The FLIR has proved useful for surveillance of landing zones at night but in 2008 the FLIR was under-used (only one night flight per month, on average).
 39. For instance, in a six-month period in 2008 (May–Nov), the number of military violations and other incidents was 352 (UN Secretary-General 2008a: 4).
 40. The United Nations is showing evidence that it recognizes the need. The July 2009 “New Horizon” paper (DPKO and DFS 2009: 27) identifies “critical shortages” in “observation/surveillance, including high resolution; night operations capability; data management and analysis”. It also notes: “Moving from a troop-intensive to a more agile mission structure and approach will depend on the feasibility of sourcing the very enabling capabilities that are currently difficult to obtain. Rebalancing numbers of personnel with more mobile capacities or technological solutions may change cost structures; it will not necessarily lower them” (2009: 28).
 41. The United Nations Commission in Korea (UNCOK) in 1950 had a mandate to monitor the security situation in South Korea. It was greatly delayed in deploying military observers, and only two had arrived by the time war broke out. It is perhaps for this reason (too few military personnel) that the United Nations does not consider UNCOK as a peacekeeping mission. However, these two Australian UN military observers did conduct a reconnaissance trip along the 38th parallel (the dividing line between North and South after World War II), returning to Seoul on 24 June 1950. Their report to UNCOK fails to mention North Korean preparations for an imminent attack. Indeed, if their jeep had so much as received a flat tyre in the final days of their trip, they probably would have witnessed first hand the onslaught by thousands of North Korean troops as the invasion of South Korea began in the early hours of 25 June 1950.
 42. See Dorn and Bell (1995).