

# THE DEPLOYMENT OF SOVIET CHEMICAL FORCES IN AFGHANISTAN AND SOUTH-EAST ASIA

Lt C.M. Meyer\* and Smn P. Theron\*

**'And let there be no doubt: if hostilities should break out, the Soviet Army would use chemical weapons against its opponents.'**  
Col Oleg Penkovsky

## Introduction

Recently chemical warfare has become a most distinct feature of military technique. This can be said after it has been established that the Soviet Union used chemical agents in South-East Asia and Afghanistan. The first reports dealt with some unexplained deaths among the Hmong people of Laos and shortly afterwards came the discovery of tiny yellow deposits of pollen containing lethal toxins. In the wake of this discovery the United States alleged that Soviet-backed forces were using 'yellow rain' toxins in violation of treaties banning biological and chemical weapons. The Soviets' strong denial met with skepticism in Western circles, and did nothing to quell a raging debate over the precise interpretation of toxins found in Kampuchea and Afghanistan. In this overview the facts and reports pertaining to the topic under discussion are correlated and examined.

## History

The application of chemical warfare really commenced before the advent of recorded history by the use of fire and smoke to overcome an opponent. At the siege of Platea in 429 B.C. burning pitch and sulphur were used while the so-called 'Greek fire' was a mixture of highly combustible substances ignited by water.<sup>2</sup>

The adoption of chemicals as weapons during the Great War (1914–1918) was logical in that the principal combatants were firmly entrenched in a stalemate situation, making any advance without terrific losses virtually impossible. Ways and means were sought to restore open warfare.<sup>3</sup>

The introduction of gas as an effective weapon in warfare dates from April 22, 1915, when the German forces launched a large-scale attack with cylinders of chlorine against the Allied position in

the Ypres Salient where the British and French lines joined.

Cloud gas attacks, although highly effective, were entirely dependent on favourable wind conditions. Consequently the extensive use of gas shells was begun in 1916. This also permitted the use of a greater number of toxic substances.

It is commonly known or realized that the nation which suffered most from chemical warfare in the Great War was Russia. Although at least 66 years separate the last deployment of chemicals against Russian troops from the present, the Soviets have never forgotten the use of chemicals as a weapon of terror.

## Laos, Cambodia and Afghanistan

It would appear that chemical weapons are being tested on a massive scale against the inhabitants of Afghanistan. It would also appear that chemical weapons have been widely and extensively used against insurgents in Kampuchea and Laos.<sup>4</sup> A wide variety of chemical agents have been tested in these countries, but three types appear to have been used with great frequency, viz incapacitant/riot control agents, a nerve agent, and an agent which causes extensive haemorrhaging.<sup>5</sup>

The Soviets appear to want to hide any evidence of their involvement with chemical weapons, as may be seen from repeated denials in the Soviet press. The Soviet Union certainly went to extraordinary lengths to avoid using Soviet personnel directly, according to the testimony of a member of the Laotian Air Force who flew chemical missions against Hmong guerrillas in Laos.

The deployment of chemical weapons took place in two stages. During the initial stage in Laos, carried out between 1976 and 1977, no



**A Soviet BRDM-rkh Radiological-Chemical Reconnaissance vehicle with area warning emplacements. The vehicle explores the boundaries of an infected zone and marks the limits.**

Soviet forces were directly involved.<sup>6</sup> This would appear to have been a small-scale feasibility study to obtain hitherto unavailable data. After 1977, a second stage was launched. It was now possible to formulate strategy and tactics for the use of new chemicals specifically belonging to the trichothecene group of compounds. It is interesting to note that an East German military manual dealing with the general tactics used to deliver mycotoxin weapons (i.e. trichothecenes), dates back to 1977.<sup>7</sup> After this date, Soviet jet aircraft (as well as the slower Antonov-12) were used against the Hmong tribesmen.

After 1979, the chemical attacks against the Hmong tribesmen in Laos appear to be more systematic, almost as if new tactics and strategy could now be used with more confidence. After 1979, numerous reports of chemical attacks against the Khmer Rouge guerrillas in Kampuchea start to emerge.<sup>8</sup>

While trichothecenes have been used in chemical attacks, there is some doubt about the ability of these agents to produce death in 10 to 15 minutes from rapid and massive bleeding.

### **Yellow Rain**

There is a close correlation between the symptoms observed in people suffering from trichothecene poisoning and those suffered by victims of many chemical attacks. However, this correlation is still not close enough to explain reports such as the following, especially the last sentence:

'Two L-19 airplanes made an attack on Pha Na Khun, a Laotian village of some 250 people, on September 28, 1978. The first sprayed yellow and green powder that was not wet like rain, but fell to the ground. The second plane followed a few minutes later and fired a rocket that exploded about 20 metres overhead releasing a red smoke. Approximately 230 people were killed almost immediately and only 19 or 20 survived. All the animals died. The yellow and green powders made everyone feel dizzy, their movements became confused, their vision grew blurred and it was difficult to move. People fell to the ground with vomiting and diarrhoea. *When the red smoke came down, people vomited blood and had massive nose bleeds.*<sup>9</sup>

The phrase 'yellow rain' entered the military vo-

cabulary in September 1981, when (Gen) Alexander Haig charged in a speech that the Soviet Union and its allies were using chemical weapons in South-east Asia and Afghanistan. Analysts were puzzled by the high amount of pollen found in some samples, however. This has led to the conclusion that many of the samples analysed were, in fact, bee excrement. This theory has been rejected by Dr Chester Mirocha, the same man who first analysed samples of trichothecenes found in Kampuchea: 'It is very difficult for me to imagine 10 000 bees defecating in synchrony over a specific village at one time, and then somehow getting trichothecenes into the pollen.'<sup>10</sup> The bee pollen theory does also not explain how T-2 toxin has been detected in numerous blood samples taken from troops close to where chemical attacks have been reported.

It is quite possible that pollen has had T-2 toxin impregnated into it. The pollen, containing the T-2 toxin, could then be used in the same way as poisonous gas.

a changing of the conventional high explosive warheads used by the above for chemical warheads.<sup>11</sup> Soviet infantry involved in a counter-insurgency campaign could largely be replaced by assault helicopters and rocket launchers delivering chemical weapons.

In such a strategy, it would be difficult to predict a chemical attack because the Hind-A assault helicopter, the MiG-21 fighter and the BM-21 rocket launcher are commonly known as conventional systems. In short, many of the Soviet weapons currently in Angola could easily be used to initiate chemical attacks against Angolan civilians and South African forces in South-West Africa.

The West in general, and the Republic of South Africa in particular, must take cognizance of this very real possibility, and be adequately prepared to deal with such a threat.

\* Lt C.M. Meyer B.Sc (Hons), HED is a member of the Citizen Force and Smn P. Theron, a National Serviceman, is attached to a newspaper in civilian life.



**Mikoyan MiG-21 multi-role fighter; version known to NATO as Fishbed-L (Tass).**

### **New possibilities**

Several weapons in the Soviet arsenal can readily be adapted to deliver chemical munitions, i.e. the BM-21 rocket launcher, and the Hind-A assault helicopter. It is also possible that the role of the Mi-24 assault helicopter and the BM-21 rocket launcher is being changed in operations where support is being given to infantry:

### **References**

1. Penkovsky, Oleg: *The Penkovsky Papers*, Collins, London, p 166.
2. 'A New Survey of Universal Knowledge', *Encyclopaedia Britannica* vol 5, p 350.
3. *Ibid*, p 349.
4. Torrey, Lee: 'Yellow Rain: is it really a weapon?', *New Scientist*, Vol 99 No 1369, 4 August 1983, p 350.
5. US Department of State: 'Chemical Warfare in Southeast Asia and Afghanistan: Report to Congress by Secretary of State Alexander M. Haig, March 22, 1982 (*Special Report No 82*)', p 8.
6. *Ibid*, p 13.