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CHEMICAL WEAPONS PROLIFERATION
IN THE MIDDLE EAST:
WHAT IS THE PROPER RESPONSE?

BY

LIEUTENANT COLONEL MacARTHUR DeSCHAZER, SR., ADA

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that Middle East countries have greatly expanded their chemical capability and that they have every intention of using it. Moreover, foreign suppliers are providing assistance to these countries as negotiations are underway to decrease worldwide chemical armaments through a Chemical Weapons Treaty. Finally, the study suggests that the proper response ought to be a strategy with a multi-dimensional approach aimed at the political and economic sources of passion that drive nations in the Middle East to acquire chemical weapons. Keywords: Chemical Weapons Proliferation,

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USAWC MILITARY STUDIES PROGRAM PAPER

CHEMICAL WEAPONS PROLIFERATION
IN THE MIDDLE EAST:
WHAT IS THE PROPER RESPONSE?

AN INDIVIDUAL STUDY PROJECT

by

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U.S. Army War College
Carlisle Barracks, Pennsylvania 17013
9 April 1990

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**CHEMICAL WEAPONS PROLIFERATION
IN THE MIDDLE EAST:
WHAT IS THE PROPER RESPONSE?**

CHAPTER I

INTRODUCTION

As the United States and the Soviet Union are about to negotiate large mutual cuts in chemical weapons, Third World countries, particularly those in the Middle East, are developing and using them more frequently and intentionally killing civilians. Seven

countries in the Middle East now have the capability to conduct chemical warfare. (See Figure 1.) In contrast, only two countries (Egypt & Israel) had more than limited capability a decade ago.

Today, Iraq and Syria have well developed chemical

weapons programs, Egypt and Israel have continued development of

**POSITIVE OR STRONG
PROBABILITY**

FRANCE
TAIWAN
UNITED STATES
SOVIET UNION
ISRAEL
EGYPT
ETHIOPIA
CHINA
NORTH KOREA
TAIWAN
VIETNAM
BURMA
IRAN
IRAQ
SYRIA
AFGHANISTAN

SUSPECTED

LIBYA
SOMALIA
CUBA
CHILE
PAKISTAN
THAILAND
SOUTH KOREA
SOUTH AFRICA

SOURCE: AUSA, SPECIAL REPORT

**Figure 1 COUNTRIES WHICH ARE CONFIRMED
OR SUSPECTED OF HAVING CHEMICAL WEAPONS**

their programs that were started in the early 1960s. Libya, thought to have used chemical weapons in its war with Chad, has apparently undertaken major initiatives in the production of chemical weapons. Iran has also demonstrated that it can use chemical weapons.

One of the most recent abuses of chemical weapons occurred in the Persian Gulf during the Iran/Iraq war. A preponderance of evidence exists showing that Iraq flagrantly violated the 1925 Geneva Protocol, which prohibits the use of chemical weapons, by using poison gas against Iran and its own Kurdish population. These weapons were used without widespread moral outrage.

Contributing to the proliferation problem is the fact that Saudi Arabia, Iraq, Iran, Libya, Israel, and Syria have shown the capability to either acquire or produce the means and munitions needed to deliver chemical agents to distant targets. These means and munitions include aerial bombs, short and long-range artillery rockets and artillery shells.

There is also a risk of terrorists using chemical weapons in pursuit of their objectives. While there is no clear evidence that terrorists intend to use chemical weapons, the availability of chemical weapons in the region provide opportunities for theft and use. This is particularly problematic in a region of the world with numerous terrorist groups, many of whom are state sponsored.

Chemical weapons have been referred to as the "poor man's atomic bomb" because of their military effectiveness and cheap costs of construction. Third World countries argue that banning

chemical weapons would deprive them of an effective means of deterrence at a time when the U.S. and the USSR continue to maintain nuclear and chemical arsenals. These developments have important implications for Arabs, Arab rivalries and industrialized countries with interests in the region.

This study will focus on the proliferation of chemical weapons use and capability in the Middle East. It will investigate the nature of the threat, assess the motivation for using chemical weapons and how Western industry contributes to the problem. It points out that Middle East countries have greatly expanded their chemical capabilities and that they have every intention of using them. It will conclude with recommendations on the proper U. S. response to chemical weapons proliferation in the Middle East.

BACKGROUND

In March 1988, Iraqi President Saddam Hussein had some problems with Iraqi Kurdish tribesmen in the northeastern part of his country. For years the Kurds had been seeking independence with the help of Iran. Because Saddam was busy fighting a war with Iran when the Kurds began to militate for their own country again, the Iraqi President did not want to deploy a lot of troops to bring them under control. Instead, he simply sent a few planes to drop chemical warheads containing a mixture of mustard and cyanide gases on the northeastern Kurdish town of Halabja and some surrounding villages. According to reporters who visited Halabja in the aftermath, at least several hundred, and probably several thousand, men, women, and children were choked to death or had their lungs burned out by the yellow-and-white gas cloud that descended upon them without any warning. Even the cats died. The chemical attack was said to be one of the biggest uses of poison gas since the Germans virtually

wiped out Ypres in 1917 with a similar killer toxic cloud.'

A similar incident occurred inside Syria in February 1982, that demonstrated a brutal form of authoritarianism that author Thomas L Friedman, calls "Hama Rules." This incident resulted from Syrian President Hafez al Assad putting down a Sunni Muslim rebellion launched from his fourth largest city -- Hama. Hama had been a hotbed of Muslim fundamentalism hostile to Assad's government in Damascus. President Assad's actions resulted in the death of 20,000 of his own citizens and virtually obliterating the entire city. In one situation, Amnesty International quoted allegations that cyanide gas containers were brought into the city, connected by rubber pipes to the entrances of buildings believed to house insurgents and turned on, killing everyone inside.'

What makes the attitudes exhibited in these incidents so dangerous is that insecure, autocratic leaders such as Hafez al Assad and Saddam Hussein seem more inclined to respond to threats against them with devastating means of destruction. These means include not only large armies but also chemical weapons. Friedman observed that:

Hama was not just what happens when two tribe-like sects -- the Alawites and the Sunnis -- decide to have it out; it was also what happens when a modern Middle Eastern autocrat who does not enjoy full legitimacy among his people puts down a challenge to his authority by employing twentieth-century weapons without restraint.'

The Iraqi attitude toward chemical weapons was further reflected in a statement made to the Western press by a senior Iraqi military official, Major General Maher Abdul Rashid, "If

you gave me a pesticide to throw at these swarms of insects to make them breathe and become exterminated, I'd use it."

In a recent speech to his armed forces, Iraqi President Saddam Hussein left no doubt about his intention to use chemical weapons. He said that, "Iraq would use its extensive stockpile of mustard and nerve gases as strategic weapons capable of delivering a devastating retaliatory blow to any aggressor, especially Israel".

In late 1983, Iranian President Hashemi Rafsanjani, then speaker of the parliament and acting Commander-in-Chief of its military forces, articulated Iran's current policy on chemical weapons:

Chemical and biological weapons are poor man's atomic bombs and can be easily produced. We should at least consider them for our defense. Although the use of such weapons is inhuman, the war taught us that international laws are only drops of ink on paper.

In early 1983, Iranians alleged that the Iraqis used nerve gas on their human-wave assaults as they were threatening to overwhelm Iraq's defenses. This was denied by the Iraqis but evidence soon accumulated that it was indeed the case. Analysts estimate that, during the eight year war between Iran and Iraq, more than one million people were killed. Several thousand of those, mostly Iranians, were believed killed by poison gas.

On 8 November 1983, Iran formally complained to the United Nations Security Council and asked that an investigation be conducted. United Nations inspections teams visited Iran and Iraq five times during their eight year war to investigate various

claims of chemical weapons use. The teams issued reports each time confirming that Iraq had used chemical weapons in the form of aerial bombs against Iran.¹ The same inspection team confirmed in April 1987, that Iran had also used chemical weapons. The four person team found evidence that Iran used mustard gas and phosgene in an examination of several bodies. The United Nations Secretary General, Javier Perez de Cuellar said, in passing along the reports of the investigators to the Security Council, that he "cannot but deplore that their unanimous conclusions substantiate the allegations that chemical weapons have been used."²

The map at Figure 2, shows areas where chemical weapons were believed to have been employed during the war between Iran and Iraq. The dangerous proliferation chemical weapons and the willingness of countries in the region to use poison gas is clearly evident. Adding to the problem of proliferation of chemical weapons use is the development by some Arab countries of more modern missiles that could deliver chemical warheads to long range targets. Arms imports in the



Figure 2 AREAS WHERE CHEMICAL WEAPONS WERE EMPLOYED

Middle East are up from \$4 billion annually in 1973 to about \$20-22 billion in 1985. Arms imports are increasing at an average of over 10 percent annually, versus one percent for the developed

world, three percent for countries in the North Atlantic Treaty Organization (NATO), and seven percent for all developing states.

By the late 1980s, every major country in the Middle East reportedly was equipped with at least a small arsenal of tactical missiles with ranges of a few dozen kilometers." At least three military powers -- Israel, Iraq, and Saudi Arabia -- also possessed intermediate range missiles that could travel several hundred kilometers and thus posed a threat to the entire region."

As with most other military technologies, Israel is at the forefront in acquiring ballistic missiles. In the late 1970s Israel obtained an estimated 160 Lance missiles from the United States; Lance has a range of about 100 kilometers. Largely on its own, Israel produced a longer-range Jericho missile in two versions, both capable of carrying nuclear warheads or 500 kilograms of conventional explosives including chemical munitions. The Jericho I reportedly has a range of 450-650 kilometers; the newer Jericho II has a range of up to 1,500 kilometers. Such a missile could attack targets throughout the Middle and southern reaches of the Soviet Union."

Israel, in September 1988, also successfully launched a small satellite into orbit. The booster rocket, called the Shavit (or Comet) is said to be convertible to a ballistic missile capable of carrying a warhead up to 7,200 kilometers." Israel also began work during the late 1980s on a defensive missile, the Arrow, intended to intercept incoming ballistic missiles.

The will to use chemical weapons, discussed earlier, is now complimented by increased capability to produce and deliver them to distant targets.

ENDNOTES

1. Thomas L. Friedman, From Beirut to Jerusalem, New York: Farrar Straus & Giroux, 1989. pp. 90-91.
2. Ibid., pp. 77-79.
3. Ibid., p. 79.
4. Ibid. p. 96.
5. W. Seth Carus, "Chemical Weapons in the Middle East," Policy Focus, Number 9, December 1988, p. 4.
6. Patrick E. Tyler, "Iraqi Warns of Using Poison Gas," The Washington Post, 3 April 1990, p. A1.
7. Ibid., p. 4
8. Congressional Quarterly, p. 83.
9. Michael Ledeen, "The Curious Case of Chemical Warfare," Commentary, Vol. 8, Number 1, July 1989, p. 40.
10. Special Report to the New York Times, "UN Team Says Chemical Arms Were Used in Iran," The New York Times, 27 March 1984, p. A4.
11. Anthony H. Cordesman, "Peace in the Middle East: The Next Fifty Years of Conflict," Regional Strategic Appraisals: Middle East, 3 January-20 February 1990, p. 23.
12. Congressional Quarterly, p. 84.
13. Ibid., p. 85.
14. Ibid.
15. Ibid.

CHAPTER II

THE NATURE OF THE THREAT

On the first of March 1989, the Director of the Central Intelligence Agency, William Webster, testifying before the Senate Foreign Relations Committee, observed that the spread of chemical weapons threatens to change the strategic balance in the Middle East. Syria, Iraq, Iran, and Libya, he said, have all greatly expanded their chemical warfare capacity and along with the technology to manufacture chemical weapons. He added that the same countries are working feverishly to acquire the means to deliver chemical weapons to their likely target.¹

Webster further testified that programs for new, longer range missiles are under way. In the meantime the Libyans have just acquired Soviet SU-24 intermediate-range bombers, complete with mid-air refueling equipment. This new capability puts virtually every country in the region within Colonel Qaddafi's striking range. In short, Webster warned, "the most radical countries in the Middle East are either ready or will soon be ready to launch chemical attacks."¹

In the cases of Iran and Iraq, this was hardly news, because both had already used chemical weapons during their long war. Many believe that Iraq's more effective use of chemical weapons enabled them to turn the war in its favor. Significantly, last December, Iraq became the first Arab country to successfully test a rocket

for launching satellites and also announced it had developed a missile with a range of 1,240 miles. It is also pursuing a nuclear capability, analysts say.'

Iran, on the other hand, is now able to manufacture limited quantities of poison gases, mainly mustard gas but probably also nerve agents. They are said to be embarked on a major effort to significantly upgrade their manufacturing capabilities. W. Seth Carus wrote in a research memorandum that:

In early 1988, a German chemical company agreed to build a large pesticide plant for the Iranians which will probably be used to make nerve agents. There is some evidence that the Iranians are trying to develop chemical warheads for some of their surface-to-surface missiles.'

Syria, Carus points out, has also considerably expanded its chemical warfare capabilities during the past five years. The Soviet Union apparently refused to supply production facilities to Syria, but the Syrians were able to obtain the necessary technology from companies in West Europe. By 1986, the Syrians were able to manufacture chemical agents, reportedly concentrating on nerve agents.'

Libya began to expand its chemical warfare capability in 1986. Libyan aircraft had reportedly attacked Chadian soldiers with chemical agents in mid-1987. These chemical agents were believed provided by Iran. By late 1988, the Libyans were prepared to start their own production at a plant located in Rabta, about 40 miles south of Tripoli. Reportedly, Libya produced approximately 150 chemical-filled aerial bombs in 1989.' Other reports indicate that Libya might be manufacturing five chemical bombs a day.' The plant

at Rabta was believed partially destroyed in a recent fire. There are some indications that the fire at Rabta might have been a hoax.

There is a new dimension to the chemical weapons threat. Libya, Syria, Iraq, and Iran are among states identified as sponsors of terrorism. These states could provide chemical agents to terrorist groups. More significantly, the availability of chemical weapons, particularly in the Middle East, provides opportunities for theft and use. The sensationalism associated with an attack with chemicals would provide terrorists the notoriety they normally seek.

In January 1989, in response to chemical weapons proliferation in the Third World, an emergency international conference was held in Paris. The objective was to reaffirm the 1925 Geneva Protocol which bans the use of chemical weapons but contains no enforcement provisions. Little was accomplished, and many Third World countries protested that this was an attempt by major powers to relegate smaller nations to permanent inferiority. Middle East representatives argued that chemical weapons were the "nuclear deterrent of the poor" and that they would contemplate chemical disarmament only if Israel gave up its nuclear devices.'

Obviously then, there are some nations that are developing chemical weapons, enhancing their capability to deliver them to targets, and willing to use them against any potential enemy. Other testimony by CIA Director Webster noted another contributing factor to the proliferation of chemical weapons in the Middle East.

He stated that. "a large measure of responsibility for this grim phenomenon belongs to parties outside of the Middle East."

ENDNOTES

1. Congressional Quarterly, The Middle East, Washington, D.C. 7th Edition, 1990, p. 84.

2. Ibid., p. 83.

3. Katherine Arms, "Iraq Has Tested Satellite Roc" Confirms, The Washington Post, December 1989, p. D-4.

4. Carus, p.4.

5. Ibid., p. 5.

6. Congressional Quarterly, p. 84.

7. Congressional Quarterly, p. 83.

8. Michael Ledeen, "The Curious Case of Chemical Warfare, Commentary, Vol. 8, Number 1, July 1989, p. 40.

9. Ibid. p. 37.

CHAPTER III

THE WESTERN CONNECTION

Assistance provided by foreign suppliers, many of whom were fully witting of the intentions of the Middle East countries to produce chemical weapons, has been the key element that has enabled these nations to develop a capability to produce chemical weapons within only a few years. And, without this assistance, these Middle East countries would have been unable to produce chemical weapons.'

The quote is further testimony by William Webster. Several companies in Eastern and Western Europe, and in Asian countries (principally Hong Kong, Thailand, and Singapore) have been involved in illegally transshipping Western technology for chemical weapons manufacture and delivery systems. China has also been a participant, but the key player has been West Germany. According to the New York Times, Germany helped Libya, Syria, Iran, and Iraq to develop their programs. The Times article revealed that a German Firm, Imhausen-Chemie, had provided the Libyans with crucial expertise for the construction of their main chemical weapons plant in Rabta.'

Imhausen-Chemie vehemently denied the story and any involvement. However, the Central Intelligence Agency reportedly relayed intelligence evidence to the German government directly linking the company to Libya.' Later a German government report to the Bundestag in February 1989, acknowledged that agencies of the Federal Republic had known for some time that Imhausen and

firms linked with it had delivered to Hong Kong know-how blueprints, and plans for the construction of the Rabta facility. Moreover, Imhausen had apparently sent engineers to Libya to assist with the construction of the Rabta facility.'

In denying the story, Imhausen had lied to the New York Times. The company attempted a coverup -- it failed. When the truth was finally revealed, the company's vice president attempted suicide. After months of investigation the German government recently indicted the president of Imhausen-Chemie.

The Libyan case is only the most publicized example of the pattern that has placed chemical weapons in the hands of radical countries in the Middle East. The German case is also crucial to the chemical weapons facilities in Iraq. A project near Baghdad was also found to have been built in large part by a German construction company. It was initially said to be a detergent factory but it was later proven otherwise.

Similarly, the main Iraqi chemical weapons facility was made possible in large part by sales from the Karl Kolb Co. of West Germany.'

Another New York Times article indicated that Kolb executives denied any equipment sold to Iraq could be used to produce poison gas. Executives further stated that his company's annual sales to Iraq had totalled about \$3 million before the outbreak of the war with Iran in 1980, but had dipped to about \$900,000 recently. They said the company faced stiff competition in Iraq from British and

Japanese companies, which they said had the biggest share of a \$19 million laboratory business there.'

As with Libya and Iraq, German companies procured for Iran crucial components for chemical weapons. In 1987 and 1988, at the request of an official in the Iranian embassy in Bonn, the German company Chemco arranged to purchase large quantities of thiodiglycol -- a precursor chemical (key chemical needed to make poison gas) from Alcolac, Inc. of Baltimore, Maryland. To evade U.S. controls on precursors destined for countries like Libya, Syria, Iraq, and Iran, the chemicals were shipped from Baltimore via Singapore and Pakistan.'

Although Germany has been the biggest exporter of chemical technology and supplies to the Middle East, all Western countries bear a share of responsibility for the proliferation of chemical weapons. This is true because, until recently, Western countries had not demonstrated the ability or willingness to enforce export controls. The problem will likely worsen.

ENDNOTES

1. Ledeen, p. 37.
2. Ibid.
3. Ibid., p. A-4.
4. Ledeen, p. 38.
5. Ledeen, p. 38.
6. Gwertzman, p. A-4
7. Ledeen, p. 39.

CHAPTER IV

MOTIVATION FOR ACQUIRING AND USING CHEMICAL WEAPONS

This study shows that there is a growing chemical warfare threat in the Middle East. It also shows that more Middle East countries are developing a chemical weapons capability and are more willing to use them against potential enemies. Moreover, these weapons are providing great effect at little cost and gives Middle East countries a way to balance their military capabilities against a more sophisticated, modernized enemy. This study suggests that Libya, Syria, Iraq, and Iran also have the capability to produce the means and munitions necessary to deliver chemical agents hundreds of miles.

Several factors seem to motivate Middle East countries to acquire and use chemical weapons. First, as discussed in Chapter I, the Middle East has led all regions of the world in arms imports. Acquiring a chemical weapons capability seems to demonstrate a desire by some countries to be self-sufficient in order to increase their military and political independence. Middle East leaders may be motivated by the realization that the political and economic change taking place among their traditional suppliers could interrupt the flow of arms and supplies into their countries. It is most likely part of a continuing effort by Middle

East countries to match or, in some cases stay ahead, of their potential enemies. The Congressional Quarterly points out that:

Every significant military in the Middle East had obtained at least the capability to produce chemical weapons, along with missiles or bombs that could deliver the poison arms to distant targets. Israel continued to add to its nuclear arsenal, apparently regarding a strong nuclear force as the ultimate safeguard against an overwhelming Arab attack or the development of atomic weapons by hostile Arab enemies.

The second motivating factor for Middle East countries acquiring chemical weapon has grown out of fear of Israel's reported nuclear arsenal as well as frustration by some countries to acquire atomic weapons. Although Israel's nuclear capability is not certain, the perception of nuclear capability along with other regional rivalries fuel the Arab need to have the leverage of a chemical weapons capability. Iraqi President Saddam Hussein gave clear indication of this in a recent speech when he said, "Iraq does not need an atomic bomb because it has dual chemical weapons." The dual reference was apparently a claim that Iraq has acquired sophisticated binary chemical weapons. Hussein's statement followed the breakup of an apparent Iraqi effort to obtain 40 triggering devices used in nuclear weapons.

For Middle East countries wanting to bolster their military capability, a third motivation for acquiring chemical weapons is obvious. They are relatively cheap and easy to make, and the required technology is readily available on the world market. Chemical weapons and the production facilities used to make them also have the advantage of being easy to conceal. According to

experts, a chemical weapons plant can be made to appear as a production facility for pharmaceuticals or agricultural pesticides.'

ENDNOTES

1. Congressional Quarterly, p. 84.
2. Jackson Diehl. "Arab Weapons Challenge Israel's Role in Region," The Washington Post, 4 April 1990, p. A29.
3. Carus, p. 7.

CHAPTER V

THE RESPONSE

What then is the proper response to this potentially dangerous situation? Congressman Les Aspin, in an article titled "Missiles, Chemicals, Nukes Threaten Peace," posits that the proliferation of missile and chemical weapons in the Middle East can be addressed six ways: denial; deterrence; preemption; defense; arms control; and peace. Denial is the policy we are pursuing today. The U.S. goal is to deny other countries the technology in order to prevent them from ever getting missiles, chemical, or nuclear weapons. This is generally done through agreements or export bans.

Although the United States, in cooperation with its allies, has had some success in denying technology to the Middle East, the measures to control the proliferation of chemical weapons have generally failed. The proper response should include bold new multi-dimensional approaches to diffuse the flow of arms and material into the Middle East region.

First, the United States should develop and implement a clear national strategy that addresses solutions to the motivations, listed in Chapter IV, that drives countries throughout the Middle East to seek advantage in a chemical or nuclear weapons capability. The strategy should include risk-taking steps to improve relations with other nations hostile to the United States in order to reduce

the chance of future conflict. Improving relations will involve finding solutions, perhaps in the United Nations arena, to the Israeli-Palestinian dispute over the occupied territories; Lebanon; the Iran-Iraq settlement; Israel's relations with Saudi Arabia; and relations between Iran, Iraq and Syria. Traditionally, the United States has given its strongest support to the Middle East's most democratic and pro-Western country -- Israel. The Soviet Union has traditionally given its strongest support to states and organizations that sponsor terrorism -- especially to Libya, Syria, and the Palestinian Liberation Organization (PLO). As political, military, and economic changes occur in the West, our strategy should be revised to ease the anxiety created by possible shift of traditional support to these countries.

Second, the strategy should include courses of action to reduce the flow of petroleum dollars to the Middle East. It is the petroleum wealth that is providing the means by which Middle East countries are able to purchase large quantities of weapons and materials. The appropriate courses of action should include strict and well developed plans to reduce the national and international dependence on oil. Fewer funds would be available for military purposes.

Third, the United States should continue to promote international (multilateral) agreements to outlaw use, production stockpiling or transfer of chemical weapons and materials. The impending bilateral treaty between the United States and the Soviet Union should be expanded to include all chemical-capable countries

in the world. The United States and the Soviet Union issued a joint statement in February 1990, announcing their intentions to press for a multilateral chemical weapons convention banning the development, production, and use of chemical weapons and eliminating all stocks on a global basis. Although this is a bold step in the right direction, the United States must be realistic about the difficulties of achieving a verifiable ban on the production and the use of chemicals. As political researcher W. Seth Carus points out, "a treaty that shields potential violators by allowing them to conduct activities under the protective cover of an arms control agreement may be worse than no agreement at all." As discussed in Chapter IV, chemical weapons have the advantage of being cheap, easy to make and easy to conceal. The best disincentive, however, against this problem is widespread willingness by the international community to enforce rules and regulations once cheating is detected.

The United States and its six economic partners --Canada, the United Kingdom, France, Italy, West Germany and Japan-- have the right idea in forming the Missile Technology Control Regime. This is an effort to deal with the flow of technology through export controls. It is an informal agreement to control technology that would enable other countries to acquire rockets that can deliver a payload of more than 500 kilograms to a range of more than 300 kilometers.¹ This same regime should be expanded to include control of the proliferation of chemical weapons and use. Additionally, it should be "globalized" to include all missile and

chemical producing nations in the world. The United States and the Soviet Union should take the leading roles in order to encourage other nations to do, in arms control and chemical weapons treaties, what they are already doing. This could go far in diffusing the previous assertion by Third World nation that this is an attempt to relegate them to a lesser status.

A comprehensive, all inclusive regime, as stated above, can create the environment for other agreements in the Middle East region and thereby reduce the impetus for chemical and military buildup.

ENDNOTES

1. Les Aspin, "Missiles, Nukes, Chemicals Threaten Peace," ROA National Security Report, Vol. 7, No. 11, November 1989, p. 12.

2. Carus, p. 13.

3. Kathleen C. Bailey, "Rushing to Build Missiles," The Washington Post, 6 April 1990, p. A15.

CHAPTER VI

CONCLUSION

The answer is not simple! No treaty, no perfect defense and no absolute weapon will eradicate the proliferation of chemical weapons and use in the Middle East. Middle East countries have greatly expanded their chemical capability and are working hard to acquire means to deliver chemical weapons to their targets. This capability will provide a retaliatory capability as long as other countries in region possess such weapons. All indications are that they have every intention to use these weapons against any perceived threat.

Contributing to the problem of proliferation are foreign suppliers. This has been the key element that has enabled these countries to develop a chemical weapons capability within only a few years. Without foreign assistance, Middle East countries would have been unable to produce chemical weapons. The U.S. should bring to bear all of its means to monitor the flow of chemical materials with the intent of totally preventing the acquisition of such materials for the production of chemical weapons. Those countries that have tolerated shipment of chemical material through and from their territory must put an immediate end to such activity.

Meanwhile, the U.S. should continue its efforts to encourage new chemical weapons agreements while promoting compliance with

the 1925 Geneva Protocol. At the same time it must capitalize on the Missile Technology Control Regime to stem the flow of missile technology as well the chemical the chemical proliferation problem. The United States and the Soviet Union have made a lot of progress in this area and will now need to involve the rest of the world into the process to make it work.

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