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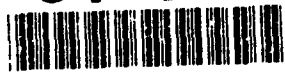
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ROLE OF BALLISTIC MISSILES IN  
THIRD WORLD DEFENSE STRATEGIES

Andrew W. Hull

June 1991

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## **PREFACE**

Ballistic missile proliferation poses a fundamentally new challenge for U.S. defense planners in general and for the Strategic Defense Initiative Organization (SDIO) in particular. This document (originally published as part of a series of "white papers"), prepared for the Director of the Countermeasures Office of the Strategic Defense Initiative Organization (SDIO), concentrates on the role of ballistic missiles in the defense plans of Third World states rather than on the kinds of missile technologies they are seeking to acquire.

As initially conceived, this paper provides a background to engineers and scientists on the Technical Red Teams about significant changes in Third World military strategy and doctrine caused by recent world events. While originally drafted with this audience in mind, this paper serves equally well to introduce the non-Third World specialist to major concepts that help shape Third World decisionmakers' thinking. This paper is also part of a continuing effort by the Countermeasures Office to identify Third World political, bureaucratic, operational, and military constraints that could influence the development and application of technical countermeasure to a U.S. Strategic Defense System, especially in light of the recent Gulf War experiences.

## **ABSTRACT**

Ballistic missile proliferation poses a fundamentally new challenge for U.S. defense planners in general and for the Strategic Defense Initiative Organization (SDIO) in particular. The following discussion concentrates on the role of ballistic missiles in the defense plans of Third World states rather than on the kinds of missile technologies they are seeking to acquire. More specifically, this paper will examine: (1) their motivations for procuring ballistic missiles, (2) the military roles and missions assigned to such systems in Third World defense planning, (3) Third World targeting strategies, and (4) implications of the foregoing for SDIO in light of the program's refocused interest in theater and limited strike defenses. The result of these efforts will be a broad overview of military implications of Third World ballistic missiles.

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## EXECUTIVE SUMMARY

- More than twenty Third World countries now have some type of ballistic missile capability either in operation or under development. The number of such countries, and the capabilities of their systems, should increase over the next decade.
- Ballistic missiles are becoming the long-range weapon of choice in regional conflicts, especially in the Middle East and Southwest Asia. That is, missiles have been used in four of the last six major wars in these two regions.
- For the two foregoing reasons, the need for theater and limited protection anti-ballistic missile systems should increase in the near future.
- Third World motivations for acquiring ballistic missiles include desires for:
  - Prestige and international status
  - Autonomy of action *vis a vis* both regional rivals and superpowers
  - Better war-fighting capability.
- The main roles for ballistic missiles in Third World defense planning include:
  - The symbolic striking of an enemy's heartland, even if the military utility of doing so or the amount of damage inflicted is low. The purpose is: (1) to bring home the vulnerability of an enemy's population to the people themselves, and (2) to make a political statement to third parties.
  - Deterring enemy attacks, and failing that, retribution. This includes an announced willingness by some Third World leaders to strike overseas U.S. military bases or U.S. cities (technical capabilities permitting) in retribution for U.S. military actions.
  - Tarnishing an enemy's tactical victory or demonstrating that he is not yet in control of the situation.
  - Demoralizing the enemy. Missile strikes can achieve an important (but transitory) effect in demoralizing the enemy early in a conflict, but have a potentially decisive impact on the end-game of a conflict when working in conjunction with other factors.
  - Surprising the enemy, thereby gaining operational initiative.
  - Carrying out deep strike and interdiction missions as adjuncts to, or surrogates for, aircraft.



- Third World target selection is severely limited by a lack of long-range reconnaissance capabilities. This means that: (1) targets must be identified and located before the conflict begins, and (2) targets must be stationary so that pre-war locational data remains accurate.
- The main targets for Third World ballistic missile forces appear to be:
  - Cities, particularly capital cities
  - Large military bases, especially air fields
  - Fixed troop staging areas
  - Fixed surface-to-air missile sites
  - Large industrial facilities that are central to national economies (e.g., oil refineries, large oil storage facilities).

## I. INTRODUCTION

*Ballistic missiles and other means of long-range destruction, traditionally limited to a handful of industrialized nations, are fast becoming a fixture in many regional conflicts.<sup>1</sup>*

*Scientific American, August, 1990*

Ballistic missile proliferation poses a fundamentally new challenge for U.S. defense planners in general and for the Strategic Defense Initiative Organization (SDIO) in particular. For one thing, more than twenty Third World states now have some type of missile capability either in operation or under development. Also, the number of such countries, and the capabilities of their systems, should increase over the next decade. These developments, in turn, suggest increasing security concerns for the United States and its Third World allies in the next ten years.

Recent experience demonstrates that missiles are becoming the long-range weapon of choice in regional conflicts, especially in the Middle East and Southwest Asia. Ballistic missiles have been used in four of the last six major wars in the Middle East and Southwest Asia: Afghanistan, the Arab-Israeli War of 1973, the Iran-Iraq War, and the just completed Gulf War in Iraq and Kuwait. This phenomenon, coupled with accelerating missile proliferation, led a recent Congressional Research Study to conclude that these developments portend: "greater destruction and loss of civilian lives in future regional conflict as adversaries become more likely to fire missiles."<sup>2</sup>

The following discussion concentrates on the role of ballistic missiles in the defense plans of Third World states rather than on the kinds of missile technologies they are seeking to acquire. More specifically, we will examine: (1) their motivations for procuring ballistic missiles, (2) the military roles and missions assigned to such systems in Third World defense planning, (3) Third World targeting strategies, and (4) implications of the

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<sup>1</sup> Janne E. Nolan and Albert D. Wheelon, "Third World Ballistic Missiles," *Scientific American*, Volume 263, No. 2, August, 1990, p. 34.

<sup>2</sup> Robert D. Shuey et al., *Missile Proliferation: Survey of Emerging Missile Forces*, Congressional Research Service, No. 88-642F, October, 1988, summary.

foregoing for SDIO in light of the program's refocused interest in theater and limited strike defenses. The result of these efforts will be a broad overview of military implications of Third World ballistic missiles.<sup>3</sup>

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<sup>3</sup> This paper will not, however, examine the trade-offs between nuclear, chemical, and conventional warheads. These issues deserve treatment in a separate paper.

## II. MOTIVATIONS FOR PROCURING MISSILES

There are several, and in some cases reinforcing, motivations for Third World states to acquire ballistic missiles. At the most basic level, there is a deep seated emotional need simply to have them. Additionally, there are the more rational desires for: (1) status and international prestige, (2) deterring one's enemies from attacking, (3) increasing national autonomy, and (4) upgrading war-fighting capabilities.

The desire to have ballistic missiles is, to some extent, almost an emotional or visceral desire in many Third World states. (Indeed, some analysts try to capture the underlying emotional drive to possess missiles by using Freudian-sounding expressions like "missile envy."<sup>4</sup>) At this level, simply *having* missiles may be a more important driver than either the nature of their technological capabilities or a nation's military requirements.

The possession of ballistic missiles is seen by many Third World states as a powerful international status symbol, as the acme of national power, and even as a rite of national passage out of technological backwardness.<sup>5</sup> As such, ballistic missile programs become the technological embodiments of patriotic and nationalistic sentiments for Third World states.<sup>6</sup>

There is ample evidence that ballistic missiles are seen as "prestige weapons" by Third World nations.<sup>7</sup> Leading Indian strategic analyst K. Subrahmanyam, for example, wrote after the first test firing of the Indian Agni IRBM:

[Its] role as a weapon is the least of its roles. It is a confidence builder and a symbol of India's assertion of self-reliance not merely in defense but in the broader international political arena as well.<sup>8</sup>

Similarly, Saudi Arabia seems to have acquired missiles more for the prestige of having them than as an attempt to match its military requirements with available systems.

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<sup>4</sup> Fred Donovan, "Mideast Missile Flexing," *Arms Control Today*, May, 1990, p. 30.

<sup>5</sup> Thomas G. Mahnken and Timothy D. Hoyt, "The Spread of Missile Technology to the Third World," *Comparative Strategy*, No. 3, 1991, p. 246.

<sup>6</sup> Ibid.

<sup>7</sup> W. Seth Carus, *Ballistic Missiles In Modern Conflict*, Praeger, New York, 1991, p. 3.

<sup>8</sup> K. Subrahmanyam, as quoted in Mahnken and Hoyt, op. cit., p. 246.

Saudi Arabia began by trying to acquire Lance missiles with a 100-km range from the United States, but ultimately purchased the Chinese CSS-2 with a 2,500-km range because China was the only one willing to sell to the Saudis. The disparity in the capabilities of these two systems suggests that operational considerations played a much smaller role in Saudi decision-making than the sheer importance of having some kind of ballistic missile capability.<sup>9</sup>

So far we have discussed the emotional motivation for Third World states to acquire ballistic missiles. But, as mentioned earlier, there are pragmatic reasons as well for wanting ballistic missiles, as will be discussed below. However, in shifting the discussion from emotional to pragmatic desires, it is important to remember that they often reinforce one another in motivating the acquisition of ballistic missiles.

Third World states, in part, acquire missiles for the same pragmatic reason as more industrialized states--deterrence. Thus, India develops ballistic missiles to deter China, but in the process prompts Pakistan to obtain missiles to deter India.<sup>10</sup> That is, Indian officials saw the Agni missile as a "manifestation of India's self-reliance" and was required because "China can reach our territory at any time." However, when Pakistan's Minister of State for Defense was asked why his nation was developing ballistic missiles, he responded that Pakistan had "to have an antidote for what our enemy [India] next door has."<sup>11</sup> The same dynamic is also at work in the Middle East. For example, Iranian Prime Minister Rafsanjani stressed that Iran's main means of dealing with the Iraqi missile threat was to bolster its own missile industries.<sup>12</sup> These strategic deterrence forces thus come to be seen as a guarantee of national survival in the minds of Third World leaders.<sup>13</sup>

Ballistic missiles are also sought to increase the autonomy of Third World states *vis a vis* the super powers; i.e., to dissuade super power intervention in regional affairs. Two Indian defense analysts are quite explicit on this point: "[Sophisticated weapons] also may be useful for developing nations to raise the cost of intervention and to help in defense."<sup>14</sup>

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<sup>9</sup> Carus, op. cit., p. 6.

<sup>10</sup> Amit Gupta, "The Indian Missile Program," *Defense and Diplomacy*, October, 1990, p. 45.

<sup>11</sup> Martin Navias, *Ballistic Missile Proliferation in the Third World*, International Institute for Strategic Studies, London, Adelphi Papers 252, Summer 1990, pp. 11-12.

<sup>12</sup> Ibid., p. 12.

<sup>13</sup> Carus, op. cit., p. 8.

<sup>14</sup> C. Raja Mohan and K. Subrahmanyam as quoted in Thomas G. Mahnken, "The Arrow and the Shield: U.S. Responses to Ballistic Missile Proliferation," *The Washington Quarterly*, Winter, 1991, p. 195.

This is perhaps what Indian observers had in mind by noting that the Agni IRBM has sufficient range to strike the U.S. base at Diego Garcia.<sup>15</sup> In a similar vein, the Israelis apparently see the possession of long-range ballistic missiles as a way of restraining Soviet intervention in future Arab-Israeli conflicts.<sup>16</sup> Regardless of actual Israeli intentions, the Soviets at least believe that was what the Israelis have in mind. And, apparently for this reason, Radio Moscow broadcast three warnings in Hebrew in the week following successful testing of the Jericho II in July 1987. Radio Moscow warned that continued development of the Jericho II might cause Israel "to encounter consequences that it could not possibly handle."<sup>17</sup> These same motivations seem to underlie North Korea's quest for nuclear weapons to arm its ballistic missiles. That is, some analysts believe that North Korea hopes that such weapons could neutralize the nuclear forces arrayed against it, including those of the United States.<sup>18</sup>

Finally, there is a growing belief in the Third World that missiles have real war-fighting value. For one thing, missiles can attack strategically important military targets deep in the enemy's rear areas. What is more, missiles offer the advantage of speed and relative undetectability by other Third World states and so confer the advantage of surprise to the attacker.<sup>19</sup>

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<sup>15</sup> Mahnken and Hoyt, op. cit., p. 252.

<sup>16</sup> Ibid., p. 249.

<sup>17</sup> Ibid., p. 250.

<sup>18</sup> Leonard S. Spector and Jacqueline R. Smith, "North Korea: The Next Nuclear Nightmare," *Arms Control Today*, March 1991, p. 10.

<sup>19</sup> Janne E. Nolan, "Ballistic Missiles in the Third World--The Limits of Nonproliferation," *Arms Control Today*, November, 1989, p. 10.

### III. ROLES AND MISSIONS

Third World states generally have much less well-developed doctrines and strategies for using ballistic missiles than do the more industrialized nations. Nevertheless, it is still possible to get some idea about the roles and missions for ballistic missiles in Third World defense plans based on what they are saying about missiles and how missiles have been used in regional conflicts.

One very important mission for ballistic missiles is the symbolic striking of an enemy's heartland, even if the military utility of doing so or the amount of damage inflicted is low. (This mission explains otherwise anomalous behavior such as Iraq's launching a SCUD carrying a concrete-filled warhead at Israel during the recent Gulf War.<sup>20</sup>)

The underlying purpose of the "strike" mission is two-fold. First, the strike brings home the vulnerability of the enemy's population to the people themselves and thereby undermines confidence in the enemy forces' ability to protect their nation. (This can be especially valuable, as in the case of Israel, where the populace had previously believed that it was safe from enemy attack.) Second, it makes a political statement to third parties which the attacker hopes to translate into diplomatic or even military support. For example, Iraq seemed to hope that its missile attacks on Israel would refocus the recent Gulf War into an Arab-Israeli confrontation, thereby splitting the Arab members from Western nations in the Allied coalition.

There are also the closely related missions of deterrence and, failing that, retribution. Deterrence can be aimed at either regional rivals or at superpower intervention. But should deterrence fail, Third World leaders want the ability to strike back, even if they are at a significant disadvantage in the overall correlation of forces. Thus, Libya launched two SCUD-Bs at a U.S. military base off the coast of Italy in response to the U.S. air raid against Tripoli in April 1986. At the same time, Qadhafi said that he would have retaliated against New York City with nuclear weapons had Libyan missiles possessed sufficient range.<sup>21</sup> He appeared intent on doing so regardless of America's overwhelming nuclear

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<sup>20</sup> "Iraq Fired Scud With Concrete Warhead," *Flight International*, March 13-19, 1991, p. 13.

<sup>21</sup> Mahnken and Hoyt, op. cit., p. 194.

advantage. Saddam Hussein also linked the twin missions of deterrence and retribution directly to the Iraqi missile force when he warned: "I swear to God, we will let our fire scorch half of Israel if it tries to wage anything against us!"<sup>22</sup>

Missiles may also serve as spoilers to tarnish an enemy's tactical victory or to promote the notion that he really has not yet achieved full control of his objective. This kind of action is illustrated by the behavior of the Afghan government. Following the loss of the garrison city of Khost to the Mujahideen, the Afghan Army fired four SCUD missiles at the city killing 10 and wounding 30 others.<sup>23</sup>

Prompt delivery, denial of warning, and assured penetration capabilities (in the absence of ballistic missile defenses) make ballistic missiles valuable military assets. These qualities, in turn, confer the "unique advantage" of surprise to the attacker.<sup>24</sup> Such an advantage is important because it allows the attacker to seize the initiative as well as dictate the timing and terms of engagement, all of which can be important components of victory as illustrated by Operation Desert Storm.

Demoralizing the enemy and destroying his will to resist are important roles played by ballistic missiles in Third World defense thinking. Experience makes it clear that missile strikes can have a powerful, negative impact on enemy morale. As Winston Churchill noted about German missile attacks in 1944:

[They] imposed upon the people of London a burden perhaps even heavier than the air-raids of 1940 and 1941. Suspense and strain were more prolonged. Dawn brought no relief, and cloud no comfort. . . . The blind impersonal nature of the missile made the individual on the ground feel helpless.<sup>25</sup>

These same emotions also surfaced among the Israelis during recent Iraqi missile strikes.

This phenomenon is well illustrated by the so-called "War of the Cities" where the Iraqis fired some 190 missiles in a six-week period at Iranian cities.<sup>26</sup> Indeed some commentators go so far as to argue that "the principal lesson" of the Iran-Iraq war was that

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<sup>22</sup> Saddam Hussein, as quoted in Navias, *op. cit.*, p. 12.

<sup>23</sup> "Kabul Answers Defeat With Scuds," *Washington Times*, April 3, 1991, p. 2.

<sup>24</sup> Former Commander in Chief of the U.S. Strategic Air Command, Gen. Thomas Powers, as quoted in Nolan, "Ballistic Missiles in the Third World--The Limits of Nonproliferation," *op. cit.*, p. 10.

<sup>25</sup> *Ibid.*, p. 9.

<sup>26</sup> Michael A. Ottenberg, "Operational Implications: Middle East Ballistic Missile Proliferation," *Aerospace And Defense Science*, October/November, 1990, p. 140.



"wars could be won by bombarding a neighboring nation's capital with conventional ballistic missiles."<sup>27</sup> Others, however, argue that demoralization was not achieved by missile strikes alone.<sup>28</sup> Instead, this second school of thought contends that missile strikes were decisive in demoralizing the enemy only because they were working in conjunction with other factors.

It appears that the psychological shock value of missile strikes is very high shortly after their initiation, but declines over time in the absence of other factors.<sup>29</sup> That is, people learn to live with the situation and are willing to "gut it out" as long as they believe the tide of the war is otherwise in their favor. For these reasons, German attacks against Britain in 1944 and Iranian missile strikes against Iraq in 1988 failed. Conversely, if the situation is already bleak, missile strikes can provide the *coup de grace* in the case of target states that were already near collapse.<sup>30</sup> Thus Iraqi missile attacks against Iran in 1988 were decisive because they came against the background of Iranian military defeats on the ground, rapidly escalated military casualties, growing international pressure on Iran, and deepening war-weariness even among Iran's Revolutionary Guards. The foregoing suggests that missile strikes can achieve an important (but transitory) effect early in a conflict and a potentially decisive impact in the end-game.

Another important role for ballistic missiles is as an adjunct to aircraft in carrying out deep strikes and interdiction against enemy troop concentrations, bases, and staging areas. Missiles and aircraft can also be integrated in attacking population centers as was done by Iraq in its strikes against Iranian cities. Perhaps because ballistic missiles and deep strike aircraft can complement each other in carrying out strategic strikes, they constitute "a strategic deterrent capability for national defense" in the words of Indian Air Commodore Jasjit Singh.<sup>31</sup>

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<sup>27</sup> John L. Piotrowski, "Detecting Ever-Smarter Missiles," *Space News*, Vol. 2, No. 3, February 4-20, 1991, p. 15.

<sup>28</sup> Thomas L. McNaugher, "Ballistic Missiles and Chemical Weapons," *International Security*, Fall, 1990, pp. 7-11.

<sup>29</sup> Ibid.

<sup>30</sup> Ibid., p. 11.

<sup>31</sup> Navias, *op. cit.*, pp. 12-13.

In some cases, this integration may mean simply operating at times when aircraft are not available; e.g., at night or in bad weather.<sup>32</sup> Ballistic missiles can also help aircraft by diverting a significant portion of enemy air operations from other militarily more damaging targets like airfields. This apparently happened in Operation Desert Storm where some significant portion of Allied air operations was redirected to search for mobile Iraqi missile launchers.

Ballistic missiles can also serve as an alternative to aircraft for deep strike and interdiction missions against military targets. This is because, in the absence of anti-ballistic missile systems like Patriot, all missiles are assured of striking their target in the absence of mechanical failure. Such is frequently not the case with aircraft in the Third World. The proliferation of potent air defenses coupled with the relative ineffectiveness of some Third World pilots against better trained adversaries means that deep strikes and interdiction by aircraft are seldom successful. For example, Iraqi aircraft were unable to penetrate Allied air defenses (on the few occasions they tried) during the recent Gulf War. Similarly, no Arab state has successfully carried out a deep interdiction strike against Israel in any of the Arab-Israeli conflicts. By contrast, Iraq was successful in striking deeply into Israel with missiles.

The results of the 1982 Lebanon War are very instructive on the dilemma faced by Third World defense planners in this regard. According to one set of statistics, the Syrian Air Force suffered about a 30 percent loss rate (i.e., 82 aircraft destroyed in only 266 sorties).<sup>33</sup> This means that a typical Syrian aircraft could be expected to survive only 2.25 missions and so the entire Syrian Air Force would disappear after only seven days.<sup>34</sup> Although we have used the Syrian example from the 1982 Lebanon War, the same pattern holds equally true for Iraqi experience in the recent Gulf War. In view of the historical ineffectiveness of Arab air operations, coupled with their high loss rates, it is not surprising that Third World states see ballistic missiles as an attractive alternative to aircraft.

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<sup>32</sup> Although sophisticated aircraft are now capable of all-weather and night-time operations, few Third World nations have such systems or are capable of operating them in this manner even if those aircraft are in their inventories.

<sup>33</sup> Carus, *op. cit.*, p. 30.

<sup>34</sup> *Ibid.* p. 10.

#### IV. TARGETING STRATEGIES

Third World targeting strategies are shaped by two broad forces. The first is mission requirements which influence what Third World defense planning staffs wish to target. The second is the constraining influence of the technical capabilities of the weapons themselves. It is from the confluence of mission drivers and technical constraints that actual targeting lists emerge. This process, however, is dynamic; as technical capabilities become more robust, targeting options increase.

Typically, target selection for Third World ballistic missiles is severely constrained by: relatively short ranges, very limited accuracy, small payloads, low per-day launch rates, and the tendency to be armed with conventional warheads.<sup>35</sup> Chemical warheads also exist for slightly fewer systems and nuclear warheads for even fewer systems. In fact, where nuclear warheads exist, they generally number in the handful rather than in the hundreds or thousands.

These qualities impose a number of significant limitations on Third World targeting options. More specifically, this means that at present:

- Targets must be relatively close (usually no more than 200-500 km away);
- Targets must be large because of poor missile accuracy;
- Targets must be "soft" because of poor missile accuracy and relatively small missile payloads;
- Targets require large numbers of "hits" because warheads are generally small and non-nuclear. (By way of illustration, it takes 10 Iraqi al-Husayn missiles, each armed with 180-190 kg of conventional explosives, to equal the payload carried by a single U.S. F-16 aircraft.<sup>36</sup>)
- Only a few targets may be attacked. This is due to present low per-day launch rates, relatively small missile inventories, and the large numbers of conventional warheads needed to neutralize targets. Otherwise, military

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<sup>35</sup> Janne E. Nolan, *Trappings of Power: Ballistic Missiles In The Third World*, Brookings Institution, Washington, 1991, pp. 63-73.

<sup>36</sup> *Ibid.*, p. 67.

effectiveness must be sacrificed in the interest of widening the war for political or psychological effect.

Third World target selection is also severely limited because the missile systems are not integrated with real-time, long-range reconnaissance capabilities. Thus, Third World military commanders are generally "blind" once conflict begins. This, in turn, has a number of practical implications for target selection. For one thing, it means that targets must be identified and located before the conflict begins, that is, while Third World states still have access to commercial international reconnaissance capabilities, foreign military intelligence data, or free human passage across borders.

The current lack of reconnaissance also means targets must be stationary so that pre-war locational data remains accurate. There are several good illustrations of this problem. In late 1986-early 1987, for example, an Indian military exercise almost erupted into a war between India and Pakistan when Pakistan misread Indian intentions. Had fighting broken out with Pakistan, India was counting on Soviet reconnaissance data to detail Pakistani troop movements. Although the Soviets did supply such data during the crisis, it came only after a critical delay. Consequently, Pakistani troops had moved well forward of the positions shown in Soviet pictures by the time India received the data and so India would have been unable to target enemy troop concentrations if it had needed to do so.<sup>37</sup> Iraq seems to have suffered a similar fate in the recent Gulf War with the United States and its United Nations allies. Prior to the war, senior Iraqi commanders may have counted on continuing to receive Soviet intelligence data about the enemy's military buildup and troop movements just as it had in the past. That data was not forthcoming, with disastrous consequences for Iraqi operational planning.

Within the limitations imposed by technical constraints, potential targets are arrayed against the mission requirements discussed earlier. Historical experience, plus what Third World leaders have said about their intentions, suggests that the following are the main targets of Third World ballistic missiles at present:

- Cities, especially capital cities
- Large military bases, especially air fields
- Fixed troop staging areas (e.g., Israeli Self-Defense Force mobilization depots, U.S. prepositioning facilities at Diego Garcia)

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<sup>37</sup> Gupta, *op. cit.*, p. 47.

- **Fixed surface-to-air missile sites, with the aim of opening corridors for aircraft penetration**
- **Large industrial facilities that are essential to a nation's most basic economic well-being (e.g., oil storage facilities or refineries).**

## **V. IMPLICATIONS**

There are a number of significant implications for defense planners. These include:

- The likelihood of ballistic missile use in future regional conflicts appears high, especially in the Middle East and Southwest Asia. Consequently, the need for theater and limited protection anti-ballistic missile systems should increase in the near future.
- Technical capabilities are a major constraint on Third World targeting decisions. This is because their missiles generally have relatively short range, are not very accurate, have small payloads, have low per-day launch rates, and are generally armed with conventional warheads.
- Third World ballistic missiles are seen as a way of discouraging superpower intervention in regional conflicts. Failing that, some Third World leaders have announced a willingness (technical capabilities permitting) to strike offshore U.S. military bases or U.S. cities in retribution for U.S. military actions. This intention appears to be irrespective of the overall correlation of forces.
- Current lack of real-time, long-range reconnaissance capabilities means that Third World states can strike only targets which (1) have been identified and located before the conflict begins, and (2) remain stationary so that pre-war locational data remains accurate.