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The Missile Technology Control Regime, American  
Theater Ballistic Missile Defense Efforts And CINC  
Planning In The Middle East and South Asia

By

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The contents of this paper reflect my own personal  
views and are not necessarily endorsed by the Naval  
War College or the Department of the Navy.

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May 15, 2000

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## Abstract

The United States is expending billions of dollars to obtain reliable antiballistic missile defenses (ABM) at the theater and national levels. The new defenses are designed to meet the expanding threat of weapons of mass destruction (WMD) delivery by missile on the American homeland, American forces overseas, and American allies. The U.S. argues that the development and deployment of ABM defenses is aimed at rogue states, e.g., North Korea, Iran, Iraq, or Libya. The new defenses are designed to be limited and not designed to counter a strike by owners of large missile forces, i.e., Russia or China. At the same time, the U.S. is a member of the Missile Technology Control Regime (MTCR), an international agreement designed to reduce the existing proliferation of ballistic missile (BM) capabilities and to contain existing capabilities at present levels. Unfortunately, many allies do not share U.S. concerns for BM proliferation, Russia and China doubt America's professed reasons for ABM defenses, and the MTCR has been unable to prevent the spread of more effective range BM technology in the Third World. This all plays a large role in American defense planning, including at the level of the regional commanders in chief of U.S. forces (the CINC's) This paper reviews the BM growing threat at the theater level, the limits of the MTCR, and the impact of both on the regional CINCs.

The Missile Technology Control Regime, American Theater  
Ballistic Missile Defense Efforts And CINC Planning In The  
Middle East and South Asia

Introduction: Weapons of mass destruction (WMD) have challenged military planners for centuries. However, the proliferation of WMD and ballistic missiles in the Middle East places this deadly combination into the hands of powers with a proven proclivity to use them. While most nations have been reluctant to use weapons of mass destruction, the same cannot be said of some countries in the Middle East. Egypt used poison gas in Yemen in 1960. Iraq used gas against Iran and in Kurdistan in the 1980's. Most countries in the region also have active WMD development and/or production programs. On the neighboring Asian sub-continent, India and Pakistan, with active nuclear weapons programs, extend the area of WMD concern to South Asia. Further complicating WMD proliferation in the Middle East and South Asia (MESA) is the concurrent profusion of ballistic missile technology capable of delivering nuclear, chemical, and biological weapons over long range. The increased range of some missiles raises the specter of WMD use outside the MESA, in southern Europe, the southern tier of the Community of Independent States (CIS), and China.

This growing threat affects the area geographic commanders-in-chief (CINCs) in several ways. <sup>1</sup> They must factor WMD delivery systems into force deployments, weapons acquisition requests, and their relations with local leaders. These plans,

in turn, translate into American national defense policy with its major affect on the national budget.

This paper reviews the proliferation of WMD-capable ballistic missiles in the Middle East and South Asia (MESA), the effects of the Missile Control Technology Regime (MTCR) on missile proliferation in those two regions and the impact of both on the regional commanders-in-chief (CINCs) of US forces. It will do so in two steps. First, the paper reviews the MTCR, its successes, and its present challenges. It will include a discussion of the motivations for nations to obtain ballistic missiles or proliferate the technology and why suppliers and buyers invest in the technology. Then, it will identify the effects of the MTCR and proliferation on the U.S. military regional CINCs.

The Missile Technology Control Regime (MTCR): Seven Western nations founded the Missile Technology Control Regime in 1987 to "restrict the proliferation of nuclear-capable missiles and related technology." <sup>2</sup> In 1993, the MTCR extended its guidelines to "cover delivery systems capable of carrying all types of WMD - chemical, biological, and nuclear weapons." <sup>3</sup> At this writing (May 2000), the MTCR is an informal export control arrangement of 32 mostly Western nations. <sup>4</sup> Members have agreed to adhere to guidelines designed to stem the spread of ballistic

and cruise missiles capable of delivering a 500-kilogram payload a minimum of 300 kilometers or more. The guidelines consist of two categories of controlled items. Category I Annex items include complete missile systems and major subsystems, e.g., engines, rocket stages, guidance systems, and re-entry vehicles. These are very rarely licensed for export. Category I also forbids the export of ballistic missile production facilities. Category II Annex items include other less sensitive and/or dual-use missile-related components. These can be licensed after review against five nonproliferation factors specified in the MTCR Guidelines.<sup>5</sup> The Regime focuses on military uses of BM and is not intended to limit peaceful space programs. Several Regime members (the U.S., Japan, Brazil, Russia and European Union members, e.g., Germany, Britain, France, and Italy) develop missiles for space programs. However, missiles designed for space use can be adapted for military uses and the Regime endeavors to ensure that exports of such technology are used "only for the purpose stated."<sup>6</sup> Guideline compliance is voluntary and depends on each nation enacting and enforcing domestic laws to support the MTCR. Sanctions or other punishments for violations are also limited to national decisions and bound by no international treaty.

MTCR Successes: The Regime's voluntary nature has been most effective in the West or states with a Western orientation. "Some countries which could have readily acquired ... ballistic missiles - such as Germany, Japan, and South Korea - have been encouraged not to do so ... other countries have joined non-proliferation agreements and abandoned development programs and weapons systems. Some examples are Argentina, Brazil, South Africa and ... Belarus, Kazakhstan, and Ukraine." <sup>7</sup> Perhaps the MTCR's greatest achievement has been limiting missile technology in the Third World to Cold War platforms or variants thereof, i.e., Soviet SCUD or Chinese and North Korean rockets based on SCUD technology. With few exceptions, most present-day Third World BM are the result of Soviet Cold War technology and largess. Ten of the thirteen MESA nations with ballistic missiles received part or all of their arsenals from the Soviet Union. <sup>8</sup> Since 1990, however, more Third World nations have begun producing missiles in indigenous programs or obtained them from third parties. Most of these weapons, too, are based on SCUD technology. For example, North Korea's No-Dong and Taepo-Dong missiles are SCUD variants, as are newer Iranian and Indian missiles. Indeed, "if not for the 1950s-vintage SCUD, much of today's ballistic missile [proliferation] would not exist." <sup>9</sup>

Rich Man's Club: The MTCR has its limitations. Many see it as "an industrial country supplier cartel to restrict missile technology exports to the Third World. The main premise underlying this approach is that industrial nations can still exert decisive influence." <sup>10</sup> This "rich man's club" approach to nonproliferation fails on several counts. First, many Third World nations see it as discriminatory and hypocritical. "It is fashionable among industrialized nations to deplore acquisition of high-technology weapons by developing nations, but this moralistic stand is akin to drug pushers shedding tears about the weaknesses of drug addicts." <sup>11</sup> Second, the pace of the global economy and dual-use nature of many products lessen the West's ability to control technology transfers. Scholars note that "knowledge-intensive goods that can be converted for military use are pouring into the marketplace faster than they can be tracked..." <sup>12</sup> Third, Third World countries lack the ability to counter the West's (read: United States') overwhelming military power in conventional terms. A Third World nation, or terrorist organization, seeking to oppose American conventional military power will probably seek an asymmetric counter to it. Ballistic missiles, possibly armed with WMD warheads, offer such a counter. "For example, had Iraq possessed mobile missiles armed with nuclear weapons, the Saudis might have been more reluctant to invite US forces into the country and the US and

its allies might have: been reluctant to go to war over Kuwait, postponed hostilities, terminated the war earlier and on different terms, or avoided attacks on sensitive Iraqi targets such as the Iraqi NCA." <sup>13</sup> The same motivation might apply to North Korea in Asia, to Iran in the Arabian Gulf, or to a well-financed terrorist organization capable of obtaining a ballistic missile with WMD capability. Fourth, Third World proliferators do not adhere to the same technical constraints of their Cold War counterparts in the U.S. and the former Soviet Union. American and Soviet weapons were subjected to long, intense research and development prior to deployment. By contrast, after only one test, a Third World missile might go straight into production and deployment. "Emerging long-range missile powers do not appear to rely on robust test programs to ensure a missile's accuracy and reliability—as the United States and the Soviet Union did during the Cold War." <sup>14</sup> The National Intelligence Estimate of September 1999 cited North Korea, Iran, and Iraq as examples of this laissez-faire type of scientific development. This lack of testing and safeguards lowers the threshold to those "satisfied with weapons that are merely sufficient and not particularly sophisticated." <sup>15</sup> The MTCR's reliance on technology denial is outmatched by this combination of Western cultural hubris, Third World resentment to it, an

open global economy, and the perceived need of some to counter U.S. conventional military superiority.

#### MTCR Challenges - Supply and Demand

The Supply Side: The MTCR's voluntary aspect has been its greatest limitation. Lacking effective controls or universal acceptance, the MTCR is unable to prohibit missile improvement, manufacture, and export by a handful of non-Regime nations. The two major Third World missile technology proliferators, China and the Democratic People's Republic of Korea (DPRK), are not Regime members. China has delivered entire missile systems to Saudi Arabia (CSS-2) and Pakistan (M-11).<sup>16</sup> The DPRK has exported missile systems to Iran, Iraq, Syria, and Pakistan, among others.<sup>17</sup> In addition to complete systems, neither nation appears reticent about peddling technical assistance, plans, and equipment for indigenous ballistic missile development. China contributed to Pakistan's construction of a factory to produce missiles with ranges up to 1,500 kilometers.<sup>18</sup> The DPRK provided assistance to Iran for a space launch vehicle (SLV) program. If successful, the Iranians might convert the vehicle into an ICBM capable of reaching the United States.<sup>19</sup> Were they to become members, it is doubtful that China and North Korea would change their ways. In 1997, China pledged to adhere to the MTCR. However, Beijing provided missile-testing technology to Iran the same year.<sup>20</sup>

The DPRK and China are not alone in the missile proliferation business. Russia also fails to adhere to Regime guidelines. The 1998 Rumsfeld Report noted that Russia (and China) "appear unlikely, albeit for different reasons - strategic, political, economic or some combinations of all three ... to reduce (their) sizable transfer of critical technologies, experts or expertise to the emerging missile powers." <sup>21</sup> The same report cited North Korea as another major proliferator. <sup>22</sup> The reason is money. For cash-strapped economies like Russia and North Korea as well as developing industrial powers like China, arms sales are major sources of foreign exchange. For example, Saudi Arabia paid \$50 million for each of its CSS-2 missiles from China in the 1980's. <sup>23</sup>

The Demand Side: "Our acquisition of these formidably sophisticated technological and military capabilities is not meant for aggression ... we have acquired these [missile] capabilities to safeguard the dignity of this nation and preserve its image as a nation cherishing tolerance, generosity and human interaction." <sup>24</sup> This quote from Iraqi Minister for Information Latif Nussayef illustrates three rationales for Third World missile acquisition, i.e., prestige, deterrence, and warfighting. While motivations differ from state-to-state, this list summarizes rationales for the MESA as a whole. Israel, for

example, has no need to acquire ballistic missiles to establish prestige. It does, however, require a credible deterrent capability against its Arab neighbors. Saudi Arabia acquired CSS-2 missiles from China for deterrence. "Once Iran and Iraq not only introduced missiles but used [them] and we saw the results, we had no option but to match [the threat]." <sup>25</sup> If one includes terror, coercion, and retaliation under deterrence and warfighting, then Iran, Iraq, and Libya provide prime examples. Iran and Iraq utilized missiles as terror weapons in the 1988 War of the Cities. Iraq launched SCUD attacks on Israel and Saudi Arabia during the Gulf War to engender terror in those nations. Libya launched SCUDs against the Italian naval base at Lampedusa in 1986 in retaliation for the American bombing of Tripoli. (It is interesting to note that the Scud's immediate ancestor, the German V-2, was named and employed as a revenge weapon [*Vergeltungswaffe*] against Great Britain.)

Five of the seven state sponsors of terrorism (Libya, Syria, Iraq, Iran, and the Sudan), as well as Osama bin Ladin's base *ad interim*, Afghanistan, are in the MESA. All possess ballistic missiles and all have WMD programs. The sixth state sponsor of terrorism, North Korea, exports missiles to both the Middle East and South Asia.

As the Iraqi Minister of Culture stated above, many of the Third World's nations see ballistic missiles as a *sine qua non*

for sovereignty and national prestige. An additional reason in the Middle East and South Asia is resurgent Islam. Samuel Huntington addresses the issue of prestige in the context of the "Islamic Resurgence." "(Islamic Resurgence) ... is the latest phase in the adjustment of Islamic civilization to the West, an effort to find the "solution" not in Western ideologies but in Islam." <sup>26</sup> Even Western-educated and Western-oriented Muslims see the acquisition of advanced technology as a means of Islamic legitimization. "We Saudis want to modernize, but not necessarily Westernize." <sup>27</sup>

While the above paragraphs make it clear that the MTCR has been able to limit BM proliferation in the MESA to SCUD or SCUD-related technology, it has had little affect on the reasons for acquiring, producing, or selling that technology. Thus, ballistic missile proliferation continues in the MESA.

The Affect on the Regional CINCs: How does missile proliferation affect the CINCs? "The regional proliferation of weapons of mass destruction and theater missile delivery means (ranges 3,000 kilometers or less) has become the greatest direct threat to U.S. forces deployed and engaged worldwide. Many states see WMD as their best chance to preclude U.S. force options and offset our conventional military superiority. Others are motivated more by regional threat perceptions. In either

case, the pressure to acquire WMD and missiles is high and the prospects for limiting them are slim." <sup>28</sup>

The CINCs responsible for American forces in the MESA face the prospect of ballistic missile/WMD use against U.S. and allied forces and civilian populations. The CINCs must, therefore, build this threat into regional planning. In his March 1999 Congressional testimony, General Anthony Zinni, CINCCENT, cited the sale of "advanced weaponry and the means to produce them" <sup>29</sup> by China, North Korea, and Russia as a major challenge in the promotion of regional stability. The National Intelligence Estimate of September 1999 further identified the problem facing American forces: "The proliferation of medium-range ballistic missiles (MRBMs - driven primarily by North Korean No-Dong sales - has created an immediate, serious, and growing threat to US forces, interests, and allies, and has significantly altered the strategic balances in the Middle East and Asia." <sup>30</sup>

Second, in addition to preparing for conflict today, CINCs must anticipate future developments. This generates initiatives for new weapons systems such as theater ballistic missile defense (TBMD) systems. The Army, Navy, and Marine Corps are investing billions on TBMD systems. For example, the Army's Patriot PAC-3 TBMD program cost from inception in FY-89 through FY-00 is over \$4.9 billion.

Third, MESA missile proliferation elicits different responses from allies within and without the region. The threat to Israel led to American technological and financial support for the now-operational Israeli Arrow TBMD. (Some in the U.S. government reportedly believe that U.S. support for Arrow is an MTCR violation.)<sup>31</sup> North of the Mediterranean, NATO is reluctant to invest in TBMD despite the dangerous combination of WMD, state sponsors of terrorism, and ballistic missiles to its immediate south. European logic is summarized by the findings of a British defense review. "Ballistic missiles without unconventional (i.e. WMD) warheads do not pose an adequate threat alone to justify specific countermeasures. ... There are many means of delivering [WMD] and the UK saw little merit in concentrating solely on one means of delivery."<sup>32</sup> This logic ignores the possibility of Libyan or Syrian acquisition of available longer-range missiles, e.g., North Korea's No-Dong or Taepo-Dong series. CINCEUR might one day face the possibility of protecting NATO with American TBMDs because Europe has no effective defenses. It is important, therefore, for the CINCs to take the MTCR's limited success into account when drawing up their war plans and weapons development requests.

Finally, the MESA, the location of the majority of world oil reserves, also hosts a number of religious, ethnic, and historic rivalries no longer constrained by Cold War bi-

polarity. Regional animosities, e.g., between Iran and Iraq, have regional and international dimensions. CINCs must learn to relate these traditional complexities to the ballistic missile and WMD capabilities of regional rivals. The 1990 Iraqi invasion of Kuwait had many complex origins and dimensions, from Iraq's claims to Kuwait as its 19<sup>th</sup> province to the vulnerability of the world oil supply and from the aggression of one Muslim state against another to the uncertain aftermath of the Cold War. Iraqi missiles and WMD capabilities vexed allied planners throughout the war and threatened to destroy Arab support for the UN coalition with attacks on Israel and Saudi Arabia. The Gulf War experience illustrated the dangers of missiles and WMD in today's complex multi-polar world. CINCs must draw lessons from that experience in their planning for both peace and war contingencies.

Another example of this dangerous combination of WMD, missiles, and potential hostilities is the India-Pakistan rivalry. The giants of the Asian sub-continent have all-but intractable differences of religion and culture (Hindu vs. Muslim) and territorial claims (Kashmir). Both have nuclear weapons and ballistic missiles that can threaten the rival's capitals. The international dimension of this bi-polar nuclear rivalry begins with long-time Chinese-Indian animosities. Concerned with Indian nuclear power and missiles, China supplies

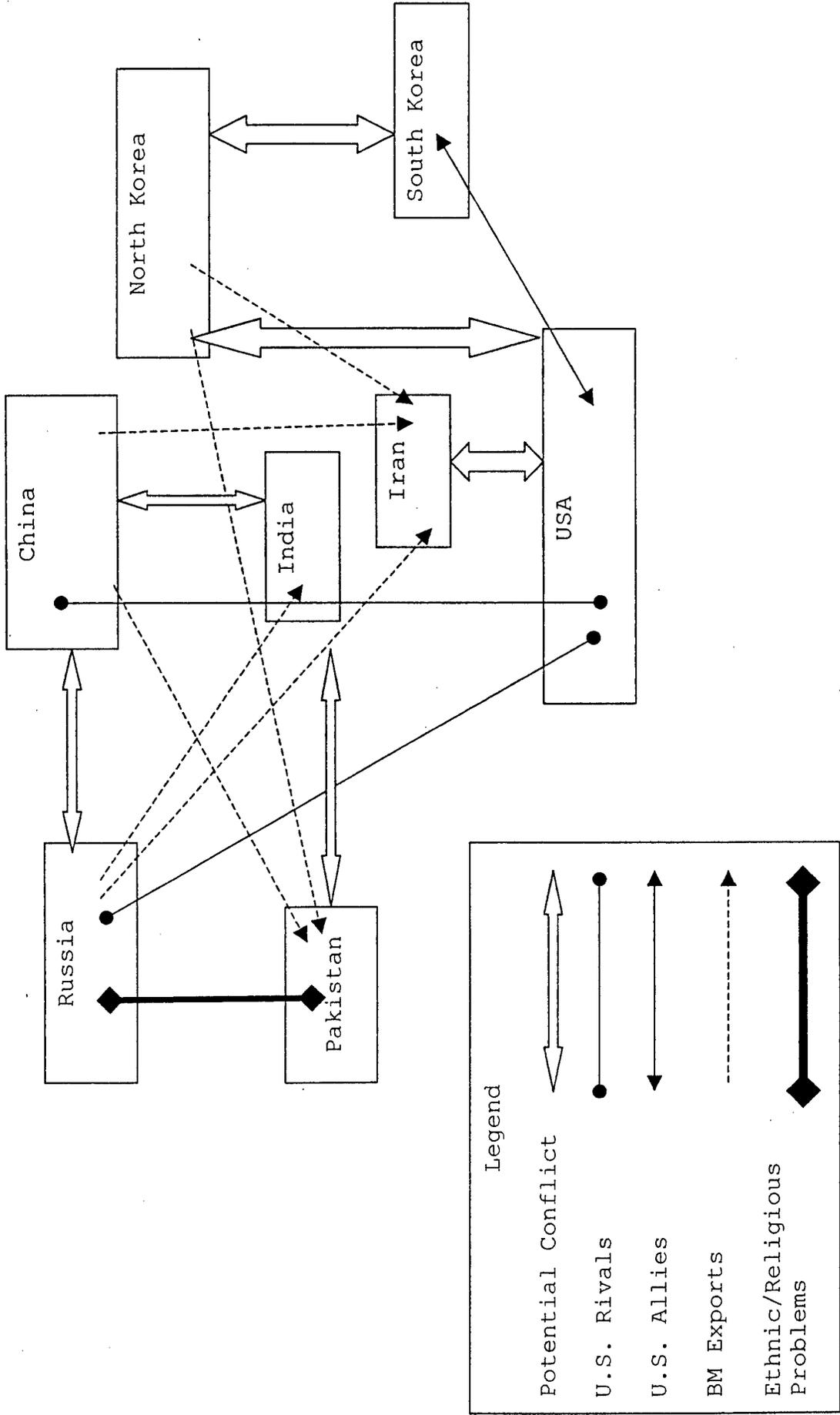
Pakistan with missiles and the means to produce them. Russia, with its potent arsenal, supports India as a potential counter to Chinese expansion and Islamic movements in central Asia. Any bi-polar conflict between Pakistan and India would exert pressure on each of the other tensions and threaten a multi-power crisis. The U.S. would be hard pressed to remain uninvolved in such a crisis. Annex A illustrates these multi-polar relationships and tensions.

Conclusion: American forces in the Middle East and South Asia face an increasingly complex region of potential conflicts. Compounding the political, social, and religious intricacies of the area is the proliferation of weapons of mass destruction and WMD-capable ballistic missiles. Recent history demonstrates that some MESA regimes are willing to use these weapons. Until costly new theater missile defenses are fielded, the American regional CINCs must rely on conventional deterrence and diplomatic tools such as the MTCR to restrain nations from acquiring or using these potent weapons. While the MTCR has been successful in limiting the spread of modern missiles, it has been less successful in restraining nations like China, North Korea, and Russia from exporting older technologies. It has been equally unsuccessful in restraining nations like Pakistan, India, and Iran from developing indigenous

capabilities to manufacture them. American military leaders, from junior officers and NCOs in-theater through their chains of command to the CINCs and the National Command Authority must face the implications of these realities and plan accordingly.

**ANNEX A**  
**South Asia**

Multi-Polar Relationships, Potential Conflicts and Ballistic Missile Trade



## Endnotes

<sup>1</sup> The CINCs in question are the U.S. Commander, Europe (CINCEUR), U.S. Commander, Central Command (CINCCENT), and U.S. Commander, Pacific (CINCPAC).

<sup>2</sup> U.S. Department of Defense, "MTCR Fact Sheet," undated.

<sup>3</sup> Ibid.

<sup>4</sup> Original Members: Canada, France, Germany, Italy, Japan, United Kingdom, and United States. Additional Members: Argentina, Australia, Austria, Belgium, Brazil, the Czech Republic, Denmark, Finland, Greece, Hungary, Iceland, Ireland, Luxembourg, The Netherlands, New Zealand, Norway, Poland, Portugal, Russia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine. Adherents: Bulgaria, Israel, Romania, the Slovak Republic, and South Korea. Excerpted from "Background Paper on The Missile Technology Control Regime", The Arms Control Association, July 1999.

<sup>5</sup> The five factors are in Section 4 of the MTCR:

- (A) Concerns about the proliferation of weapons of mass destruction;
- (B) The capabilities and objectives of the missile and space programs of the recipient state;
- (C) The significance of the transfer in terms of the potential development of delivery systems (other than manned aircraft) for WMD;
- (D) The assessment of the end-use of the transfers, including the relevant assurances of the recipient states referred to in sub-paragraphs 5.A and 5.B (below);
- (E) The applicability of relevant multilateral agreements.

- 5. (A) The items will be used only for the purpose stated and that such use will not be modified nor the items modified or replicated without the prior consent of the supplier government.
- (B) Neither the items nor replicas nor derivatives thereof will be retransferred without the consent of the supplier Government.

<sup>6</sup> MTCR Guidelines Section 5.A.

<sup>7</sup> Rumsfeld, Donald H., et al, "Report of the Commission to Assess the Ballistic Missile Threat to the United States," July 15, 1998, 4.

<sup>8</sup> Regional nations with SCUD weapons received from the Soviet Union or third parties are: Afghanistan, Algeria, Egypt, India, Iran, Iraq, Libya, Syria, the UAE, Yemen.

<sup>9</sup> Karp, Aaron, "The New Politics of Missile Proliferation," Arms Control Today, 10/96, p. 11.

<sup>10</sup> Nolan, Janne, "Preventive Approaches: The MTCR Regime," Edited by Lewis, William H. and Johnson, Stuart E., "Weapons of Mass Destruction: New

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Perspectives on Counterproliferation," National Defense University Press, Washington, DC, 1995.

<sup>11</sup> Mohan, C. Raja and Subrahmanyam, K., "High-Technology Weapons in the Developing World," quoted in Nolan, Janne, "Trappings of Power", 11.

<sup>12</sup> Goldman, Emily, "Arms Control in the Information Age," in "Arms Control: New Approaches" Ed Gallagher, Nancy, Frank Cass, London, 1998, 25.

<sup>13</sup> Khalizad, Zalmay, "Weapons of Mass Destruction: New Perspectives on Counterproliferation," Edited by Lewis, William, Johnson, Stuart, E., Institute for National Strategic Studies, National Defense University Press, Washington, DC 1995, 128.

<sup>14</sup> U.S. Central Intelligence Agency, Directorate of Intelligence, "Foreign Missile Developments And The Ballistic Missile Threat to the U.S. Through 2015," National Intelligence Estimate, September, 1999.

<sup>15</sup> Ibid.

<sup>16</sup> Rumsfeld, Donald H., et al, "Report of the Commission to Assess the Ballistic Missile Threat to the United States," July 15, 1998, 4.

<sup>17</sup> Ibid. 5.

<sup>18</sup> Beaver, Paul, "China Prepares to Field New Missile," Jane's Defense Weekly, 2/24/99, 3.

<sup>19</sup> "US Intelligence Estimate Warns of Rising Missile Threats", Arms Control Today Website, 3/26/2000, 1 - 2.

<sup>20</sup> Gertz, Bill "Russia, China Aid Iran's Missile Program," The Washington Times, 9/10/97.

<sup>21</sup> Rumsfeld, et al, 5 - 6.

<sup>22</sup> ibid. 4 - 5.

<sup>23</sup> Nolan, Janne, "Trappings of Power: Ballistic Missiles in the Third World," The Brookings Institution, Washington, DC, 1991, 10.

<sup>24</sup> Nusayyif, Latif, quoted in Navias, Martin S., "Going Ballistic: The Build-Up of Missiles in the Middle East," London, Brassey's, 1993, 36.

<sup>25</sup> Saudi Prince Bandar bin Sultan quoted in Navias, 57.

<sup>26</sup> Huntington, Samuel, "The Clash of Civilizations, Touchstone Books," New York, 1996, 109.

<sup>27</sup> Prince Bandar bin Sultan, New York Times, July 10, 1994, quoted in Huntington, Samuel, 110.

<sup>28</sup> Patrick M. Hughes, U.S. Congress Senate, Armed Services Committee, Worldwide Threats to the Security of the United States, Hearing before the Armed Services Committee, 106<sup>th</sup> Congress, 1<sup>st</sup> Session, February 2, 1999.

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<sup>29</sup> Zinni, General Anthony, "Statement," U.S. Congress, House. Armed Services Committee, Proliferation of Weapons of Mass Destruction, Hearings before the Armed Services Committee, 106<sup>th</sup> Congress, 1<sup>st</sup> Session, March 11, 1999.

<sup>30</sup> U.S. Central Intelligence Agency, Directorate of Intelligence, "Foreign Missile Developments And The Ballistic Missile Threat to the U.S. Through 2015," National Intelligence Estimate, September, 1999.

<sup>31</sup> Clarke, Duncan L., "The Arrow Missile: The United States, Israel And Strategic Cooperation," The Middle East Journal, Volume 48, Number 3, Summer 1994, 487.

<sup>32</sup> Fox, E. & Orman, S., "Will Europe Invest in Missile Defense?" The Journal of Social, Political, and Economic Studies, Volume 24, Number 1, Spring 1999, page 3.

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