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Recommended Citation

Alexander A. Pikayev, "EAST ASIA AND MISSILE DEFENSES: RIGHT MILITARILY AND WRONG POLITICALLY?", nuclear policy 2nd workshop, March 03, 2001,
https://nautilus.org/projects/nuclear-policy-2nd-workshop/e-st-asia-and-missile-defenses-right-militarily-and-wrong-politically/

"Partnership for Peace: Building Long-term Security Cooperation in Northeast Asia"
The Second Collaborative Workshop on East Asia Regional Security Futures

The Center for American Studies, Fudan University
Shanghai, China, March 3-4, 2001

EAST ASIA AND MISSILE DEFENSES:
RIGHT MILITARILY AND WRONG POLITICALLY?

by Alexander A. Pikayev*

ABSTRACT
Developments in East Asia represent, probably, the most intriguing and challenging factor in shaping global security for the twenty-first century. Despite the financial crisis that took place in late 1990s, the super-region reemerged again as one of the most dynamic area in the world. At the same time, economic problems in Japan, South Korea and South East Asia temporarily halted the elevation of their role in international politics. Developments in Indonesia demonstrated how fragile political systems in many East Asian states can be and the risk that domestic political stability might be broken suddenly by economic hardships. Prospects for internal destabilization for many key regional players effectively prevent establishing a regional collective security system based on economic integration and common political values like the one emerging in Europe.

A decade long economic stagnation in Japan and the weakening of some ASEAN countries sharply contrasted with the consistent growth in China, which further consolidated its regional position as a result of the Asian financial crisis. The return of Hong Kong and Macao in 1997 and 1999 respectively also considerably contributed to the Chinese economic and political might. The task of integrating Beijing into a cooperative environment in the Western Pacific is becoming an urgent task. However, it is not possible to achieve because the environment itself has not yet been formed.

Gradual but steady changes in the regional balance accompanied by periodic tensions across the Taiwan Strait is slowly eroding a system of the US led alliances in the East Asia. The US security guarantees cannot provide the allies with a feeling of security like the one enjoyed by the Europeans after the end of the Cold War. At the same time, there is little prospect of establishing alternative security arrangements which would be capable of adequately addressing the changing security environment in the region.

An absence of a truly integrated area in the Western Pacific, difficult political relations and mutual suspicions between some of key regional players makes the continuing US geopolitical presence there an extremely and increasingly important stabilizing factor. There is a critically urgent need to halt further erosion of the US security guarantees, and, hopefully, to reverse the process. In that context, anti-missile defenses are widely considered not as a panacea, but a primary tool for preserving the US presence and, thus, maintaining the fragile regional stability.

MISSILE DEFENSE RATIONALE

It is symptomatic, that both primary factors of the US commitment to missile defense deployments originated in East Asia. Combination of the 1996 Chinese missile launches towards Taiwan together with Beijing minimum deterrence capabilities against the North American targets challenged credibility of the US security guarantees to its regional allies. The 1998 North Korean launch over Japan question overall US military presence overseas already in not too distant future.

Indeed, if the anti-missile defense provides the United States with a feeling of invulnerability of its national territory, Washington might be more willing to act decisively if its allies in the Western Pacific were externally challenged. Not surprising, that the 1996 Chinese missile launches into the Taiwan straight so considerably contributed to the US anti-missile debates.

At that time, in a response to what was perceived by the Clinton administration as a coercive strategy, the United States send aircraft naval groups closer to Taiwan. That move allegedly triggered an overreaction in Beijing. An authoritative military source said, that any US military involvement into the Chinese domestic affairs might cost the Americans nuclear attack against Los Angeles. The overstatement revived debates inside the Beltway on whether Washington should permit itself to maintain minimum deterrence relationship with China, or alternatively, it should looking for military and technical means permitting to return back to situation of 1970s when Beijing did not possess ballistic missiles capable delivering nuclear warheads to targets located in North America.

Certainly, the Chinese argument was not the only rationale for shifting the US domestic debates from accent on theater missile defenses (TMD) into national missile defenses (NMD). Nor it was the main public argument. To the contrary to late 1960s, when

President Johnson used the Chinese threat in order to promote the US missile defenses, thirty years later Washington clearly preferred not to add oil into international criticism of its controversial NMD plan by portraying China as its principal target. Moreover, John Holum, an undersecretary of state, during his 2000 visit to Beijing said that the United States remained comfortable with their deterrence relationship with the Chinese. Nevertheless, the China factor is often mentioned by both US analysts and media as an important reason to deploy the limited US NMD.

In the United States, the domestic public opinion radically shifted in favor of NMD deployments when North Korea launched its what might be a medium range missile in August 1998. In a quite provocative way, the missile flew over the Japanese territory and produced understandable anger in Tokyo. In that case, Pyongyang simply repeated what the Chinese demonstrated two years before by launching their missiles over Taiwan. One could however argue, that from the viewpoint of an international law, Taiwan is no more than the Chinese province, while Japan enjoys a different status vis-a-vis the DPRK.

Fortunately for the US NMD advocates, the North Korean missile launch took place literally few weeks after unclassified version of the Rumsfeld Commission report was published. In that report, it was claimed that earlier intelligence estimates that missile threat for the US national territory was not expected in the foreseeable future were wrong, and such threat could unexpectedly emerge already in the short term. The North Korean launch became sudden and dramatic confirmation of the conclusions made by the Rumsfeld Commission.

The DPRK launch was a psychological shock, which fall on already fertile soil. The United States not immediately and quite painfully accepted their vulnerability for the Soviet and then Chinese missiles. Washington was clearly unprepared adopting to vulnerability from the North Koreans and other unpredictable “rogues”. That process, if continued, could put under risk not only American troops stationed abroad, but the US soil itself and thus question the overall US military presence overseas. Given tremendous American sensibility to human losses, any dictator could calculate that if he possessed missiles capable reaching the US territory, Washington would have to refrain from adversarial military involvement into a regional war with his participation. Therefore, the Americans feared, several important regions might become sanctuaries for aggressions, and Washington will be deprived from freedom of interventions.

NORTH KOREAN MISSILE THREAT?

It is widely assumed that the North Korean ballistic missile launched on August 31, 1998, represented a modernized version of the Soviet short range Scud missile. The original Scud R-17 ballistic missile with range at 300 kilometers and throwweight of 1000 kilograms was developed at the Soviet Mashinostroyeniye design bureau located in the city of Miass, the Urals. It was a single stage missile with liquid fuel (geptyle with nitrogen acid oxydizer) engine. The missile weight was 5.8 tons and it was road mobile system. Serial production took place at Votkinsk machine building plant, where SS-27s ICBMs are recently produced. The Soviets produced it in numbers far exceeded quantities of other types of guided surface-to-surface missiles constructed elsewhere.

Since mid-1970s it was exported under title R-17E (see Table 1). For some countries, like Iraq, the Soviet Union sold hundreds of such missiles. Until 1988 they were inter alia delivered to Libya, Syria, Egypt, Warsaw Pact states. Under the contracts, the recipients were normally prohibited from the missiles’ modernization and re-export. But the

importers, especially, after the Soviet collapse, often - both openly and covertly - violated these provisions. As a result of re-export, the Scuds appeared in the countries, where they had never been exported by the USSR. DPRK was among them.

It should be mentioned that the Scud possessors attempted to modernize the missiles together, by financing each other projects and exchanging by technological data. Some of them were capable to produce their own systems based on Scuds, and exported them as well. Reportedly, some of the possessors received technical assistance from China.

The North Korean missile program started in 1981, when it purchased several Scuds ? from Egypt. Pyongyang was capable to organize its own production of the missile modification - Scud A, and then modernized it into more capable Scud B system. It was produced serially with a monthly rate of 8-12 missiles. In July 1987 DPRK sold 100 missiles to Iran and, probably, helped Tehran to start its own Scud production. Since 1991 the North Korea initiated full scale production of a new Scud C modification.

Table. North Korean Scuds with their Soviet parent system

Scud Project	Producer	Maximum range, kilometers	Production started (year)	Other classifications
Scud F	USSR	300	1975	R-17: Soviet name SS-1 - NATO Clssification
Scud A	DPRK	300	1984	Modernized version of the Soviet R-17E
Scud B	DPRK, Iraq, Iran	320	1985	Insignificant Sucd-A modification
Scud C	DPRK, Iran	500-650	1991	In Iraq classified as Al Hussein
Scud D	DPRK	~1000	1993	Nodong-1
Scud E (Scud X)	DPRK	?	?	Nodong-2

Source: Gennady Khromov. On the question of so called missile threat from Iran and DPRK. - Yadernoye rasprostraneniye, # 29-30, April-June 1999 (in Russian)

According to official Russia's data, on August 31, 1998 the North Korea launched a new two stage missile. In its statement from September 4 Pyongyang claimed that it made a satellite launch to celebrate the 50th anniversary of founding the DPRK. Experts agreed that the new missile used Nodong-2 system. Nodong-1 and Nodong-2 represent the second generation of Scud based missiles. Under some estimates, Nodong-1 range can be approximately 1,000 kilometers, if the warhead weights 1,000 kilograms. The Iranian Shahab 3 missile also tested in 1998 is perceived to be a version of the Nodong 1. The longer range of the Nodong-2 at 1,300-1,500 kilometers was reportedly reached by increasing length of fuel tanks. It led to higher weight of the system by 2-3 tons and decreasing the warhead's weight to 700 kilograms. To let them flying, more Scud engines were placed on them.

Although the Nodong project is on its early phase of implementation, the North Koreans already working on the Scuds' third generation - Taepodong missile. It consists of two stages, which might permit to increase range up to 3,500 kilometers. The first stage is

based on Nodong-2 technology, the second one - on Scud C or even Nodong-1. Since the missile could be too heavy - with the weight at several dozens of tons, Pyongyang might be incapable to maintain its mobile basing.

The main technical problem for the North Korean missiles is represented by their engines still based on the 9D21 system designed in the Soviet Union for original Scuds in early 1960s. It was specifically designed for a tactical missile with the weight at 5.8 tons, and would be insufficient for much heavier medium range missiles. For instance, 10 such engines would have to be installed on the first stage of Taepodong missile with its weight at 50-70 tons. However, this technical challenge might be solved if the Chinese agreed to deliver more powerful engines, say, from Dong Fang 3 (CSS-2) missiles.

Technical experts arguing, that if old engines used - a common problem for all Scuds possessors, - a need to increase range usually leads to diminishing throwweight, and thus payload which can be delivered to the target. The guidance system, originally designed for a tactical missile, also cannot provide reasonable accuracy for longer range missiles. Thus - the longer range, the lower payload and accuracy of a missile system based on quantitative modification of the Scuds. Another argument is that both the United States and the Soviet Union, before deploying new missiles, made few dozens of their flight tests, usually, several per year. The North Koreans clearly lack test support facilities, and historically they were capable making just one flight test per several years.

Obtaining missile capabilities per se does not represent significant security risk for potential target. The real challenge is whether the missile possessor gained WMD technology, and if yes, whether it has technological ability to weaponize it and place on missiles as warheads. In a case of North Korea, it would took probably decades until it would develop nuclear warhead small enough to be delivered by a domestically produced missile at intercontinental distances. Regarding chemical and biological weapons, which would likely require much smaller throwweight, Pyongyang has been never accused in their developing and production.

North Korea is a small country. Although surprising 1998 test could be considered as an argument supporting inefficiency of technical reconnaissance means, that might be likely result of lack of attention paid for Pyongyang’s missile program by international intelligence community. It is not inconceivable that if sufficient resources could be concentrated on electronic as well as space based optical reconnaissance, heavy ballistic missile might be timely detected during its preparation for start and destroyed at its launch pad.

Neither North Korean missile possesses strategic intercontinental range. Its interception during flight trajectory requires not strategic, but capable theater missile defenses (TMD). Such defenses are not prohibited by the US-Russian Anti-Ballistic Missile (ABM) Treaty signed in 1972. In fact, unlimited tests of the US TMD systems were permitted by the US-Russian demarcation agreements concluded in New York in September 1997. Furthermore, the ABM Treaty itself permits limited anti-missile tests under certain restrictions.

In 1990s Pyongyang demonstrated relatively cooperative approach in nuclear field. It helped to move forward initiatives reached under the 1994 Framework Agreement. In 2000 the DPRK broken its self imposed isolation from the South agreeing on historic visit of South Korean president to the North. It dramatically changed political environment around Pyongyang, and raised hopes that North Korean missile problem could be solved

by political means. Under few occasions, the DPRK leaders also made clear that under certain conditions, they could be ready to halt their further missile tests.

Anti-missile defenses remain doubtful in terms of security on the Korean peninsula as well. Significant short-range North Korean missile capabilities and short distances between the demilitarized zone and some vital South Korean urban centers like Seoul raise doubts on whether TMD could provide additional security for the South. Likely, attempts to develop and deploy it would provoke North Korean tactical missiles build up - and they have already demonstrated their capabilities to produce more than a hundred of such systems annually. As a result, Pyongyang could increase its offensive deployments up to a point, when they might saturate initially modest defenses. Political price for such offense-defense arms race could be also too high, putting under risk prospects for rapprochement between two Koreas, which recently look reasonably promising. In that context, dialogue between Pyongyang and Seoul, which started in 2000, has significantly undermined TMD perspective in the peninsula.

Indeed, the North Korean missile program poses certain challenges for the US and regional security. However, recently prospects for their political solution has considerably enhanced. Nevertheless, some kind of non-provocative military responses would be also workable and even desirable (like those in transparency area). It is doubtful, however, that significant, costly and futuristic NMD deployments represent an adequate response to the threat which might never materialize. Even in the missile defense field, solutions could be found without jeopardizing existing arms control agreements, notably, the ABM Treaty.

CHINA FACTOR

The China factor could be considered as much more serious argument in favor of the US large scale missile defense deployments, or against them. The main question here is whether the anti-missile defense would really consolidate the US security alliances in the Western Pacific and thus deserve support, or, quite oppositely, it would trigger a chain of undesirable consequences.

The NMD debates demonstrated new intriguing development in global interaction between nuclear powers. While the post Cold War environment brought situation of unique security to Europe, traditional nuclear related risks shifted to North East and South Asia. Emerging China is clearly playing growing role in national security calculations of both the United States and Russia. Possible Beijing’s reaction on potential US NMD deployments could be considered as one of main challenges not only for regional but global security developments.

So far China pursued very restrained nuclear policy. By early 1980s it obtained technological feasibility to hit targets located in North America. Since that, it reportedly deploys two or three dozen missiles capable to fulfill that mission. In fact, during last two decades of the XX century, the Chinese sent a clear message to Washington on their reluctance to move beyond minimum deterrence relationship with the United States, and thus on their desire to avoid nuclear arms race with them.

Under certain circumstances, even initially limited US NMD might intercept all the Chinese missiles. As a result, if China maintains its intercontinental nuclear deployments at their recent levels, Washington could effectively deprive Beijing with keeping its minimum deterrence option. Consequently, already in next decade China might

strategically find itself in a situation it faced in mid-1970s, when it was unable delivering warheads to the US national territory. However, the geostrategic environment could be very different: since the Cold War Washington clearly demonstrated that it was not willing anymore to adjust its regional interests to Beijing's sensitivities, especially on Taiwan issue. Due to that, some Chinese analysts might perceive, that maintaining minimum nuclear deterrence in relations with the United States could be a vital element guaranteeing American restraint if something happens around the Taiwan straight.

Until now, the Chinese abstained from publicly announcing their military reaction on possible US NMD deployments. However, it is not inconceivable that they would try to maintain their recent minimum deterrence capabilities in their relationship with the United States they have achieved two decades ago. If Beijing develops MIRV technology, it might be assured from negative impact on its deterrence forces, which could be inflicted by the American anti-missile deployments, by initiating relatively modest missile production program already in coming years. By producing, say, 10 to 15 ballistic missiles per year each capable to carry 4 to 6 warheads, the Chinese would be able to increase size of their intercontinental nuclear forces up to around 1,000 warheads within next twenty years. In other words, one could imagine a realistic scenario when Chinese strategic nuclear capabilities would increase by two orders of magnitude already in the foreseeable future, probably, before the United States could deploy effective anti-missile defense system.

This policy does not mean initiation of the US-Chinese arms race in a type took place between the Soviet Union and the United States during the Cold War. To the contrary to Moscow, Beijing evidently does not seek numerical strategic nuclear parity with Washington. The ballistic missile deployments could force it to start significant nuclear build up in order to preserve recent nuclear status quo. Given uncertain technological prospects of missile defenses, in the near future, time would work for offense rather than defense.

This nuclear build up would affect not only the US-Chinese relations: Moscow might face difficult choices as well. Recently, the Chinese conventional predominance vis-a-vis vast but under-populated Russian Far East is balanced by Moscow's superiority in nuclear weapons. Along with China's nuclear build up, this superiority might be considerably eroded, and Russia's positions in the Far East would further weaken.

Those developments could be contained by additional Russian non-strategic deployments and could create a motivation to abandon the INF Treaty. Due to shrinking strategic forces, Moscow would need a substitute for maintaining its nuclear leverage in the Far East, which might be very difficult to achieve by remaining inside the existing INF restrictions. Beijing is not a party of the INF Treaty and deploying dozens if not hundreds delivery vehicles with a range between 500 to 5,000 kilometers, which enable him hitting the whole Russian territory including the vital targets located in European Russia.

In other words, in quite unpredictable way the US-Chinese disagreements over the NMD deployment might pose under threat bilateral US-Russian nuclear arms control regime - the INF Treaty. Given Russia's position in both Europe and Asia, possible Moscow withdrawal from that agreement might affect nuclear developments to the west from its borders and revive debates on the continuing US nuclear presence in the continent.

Possible Chinese nuclear build up might provoke nuclear chain reaction to another

direction. Rightly or wrongly, India clearly links its own nuclear capabilities with China, and increase of the Beijing's forces could stimulate New Delhi to accelerate and expand its own weapons programs. If that happens, Pakistan - India's regional archrival - would unlikely stay indifferent, and would proceed forward with its nuclear forces as well. In its turn, Islamabad possesses delicate relations with its western neighbor - Iran, which also might find difficult to abstain from that arms race indefinitely. (1)

In more positive developments, an understanding that the Chinese nuclear plans could become central in determining future global nuclear interaction should motivate both Washington and Moscow to occupy more creative and cooperative approach in their nuclear relations with Beijing. In that case, vis-à-vis the Chinese, Russia could find itself in the same position, like the United States found themselves vis-à-vis Russia. The Kremlin might seek transparency over the Chinese stockpiles in order to guarantee, that their possible nuclear build up is concentrated in intercontinental capabilities and does not affect a part of the Chinese substrategic nuclear forces directed at Russian targets. From its part, Washington should also take into account prospects of the Chinese nuclear build up and, probably, adjust its NMD plans in a way, which would help to limit destabilizing consequences of that build up. Furthermore, if the United States and Russia develop mutually acceptable exit from their recent nuclear arms control impasse, they would have to elaborate mutual or parallel strategy aimed at alleviating Beijing's legitimate security concerns.

Potential significant TMD deployments in the region would likely affect the Chinese missile posture as well. Debates of mid-1990s on TMD deployments in Taiwan has already provoked manifold increase in the Chinese missile deployments on the continental coast of the Taiwan straight. Beijing clearly wanted to preempt potential Taiwanese TMD by deploying missiles in quantities far exceeding any expected interception capabilities of the defenses in the foreseeable future. As a result, there are indications that Taiwan is gradually loosing interest to anti-missiles. What happened on the coast of Taiwan straight, might provide a clue on developments, which could emerge in the US-Chinese strategic interaction.

Like in North Korean case, accent on predominantly military means in dealing with really emerging security challenges might be counterproductive in the Chinese case. More likely, they add problems rather than bring solutions. Relations with China are so important for shaping future of the Asia-Pacific and the world in general, that they deserve much more creative treatment, than simply relying on magic military technologies, especially since they have to confirm their miraculous impact yet.

JAPAN'S DILEMMA

Tokyo could be considered as a capital, which found itself amidst negative developments without provoking them. The developments directly affect its security, but Japan has few tools in its disposal for dealing with them, since they take place largely beyond its control. Tokyo clearly faces unpleasant choices, and might have to use all its diplomatic art in order to avoid further complications.

Among powers in the region, Japan probably pursues the most pacifist foreign and security policies. Despite all debates and external pressures, Tokyo still avoids any detectable remilitarization, and its prospects, at least, for the time being, remain slim. It seems, that the country enjoys strong domestic commitment for continuing that policy. Under those circumstances, Japan is vitally interested in and strongly dependent on the

US security guarantees. If so, it has also to support everything, which would help to maintain American presence in the Western Pacific, including anti-missile defenses.

On the other hand, Tokyo is much closer to Beijing than Washington - in both geographic and cultural terms. From the Japanese Isles it is better seen that large scale TMD deployments might provoke the Chinese, at least, to retarget dozens if not hundreds of their medium range missiles to the north-east. It faces the same risks by hosting elements of the potential US NMD on its territory, especially weapons systems, like future boost phase and early mid-course interceptors. If tensions further grow, Japan might find increasingly difficult to accommodate its allied obligations and loyalty with a desire not provoking emergence of more militarized regional environment.

However, to the contrary to South Korea, Japan might pursue less self restrained attitude towards TMD. The 1998 North Korean missile launch looked clearly offensive vis-a-vis Japan, although Pyongyang geographically lacked alternative azimuths for launching its Taepodong (maybe, except politically much riskier option to fire it towards Sakhalin). This provides Japan with legitimate security rationale to develop a limited TMD designed exclusively for intercepting few North Korean missiles. At the same time, if the task is not provoking China, Beijing will have to be provided with guarantees, that the system is not aimed at its missiles.

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(1) More details about possible reaction in Asia on the US NMD deployment see: Joseph Cirincione, Asian Nuclear Chain Reaction, Foreign Policy, Wash., DC, Spring 2000.

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