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# **PREFACE**

Most senior U.S. policymakers appear to assume that U.S.-China relations will continue to improve for the indefinite future. Many also apparently believe that this rapid rise of a waxing power, historically a frequent source of international instability and conflict, will be managed successfully, principally because "economic liberalization will inevitably lead to political liberalization." As a result, there is little desire to think about the question, "what if it isn't so?" Consequently, the general tendency is to assume that U.S. policy likely will be conciliatory or at any rate temporizing, even towards a more aggressive China. Certainly there appears to be little public thinking being done about tougher responses to a more hostile PRC.

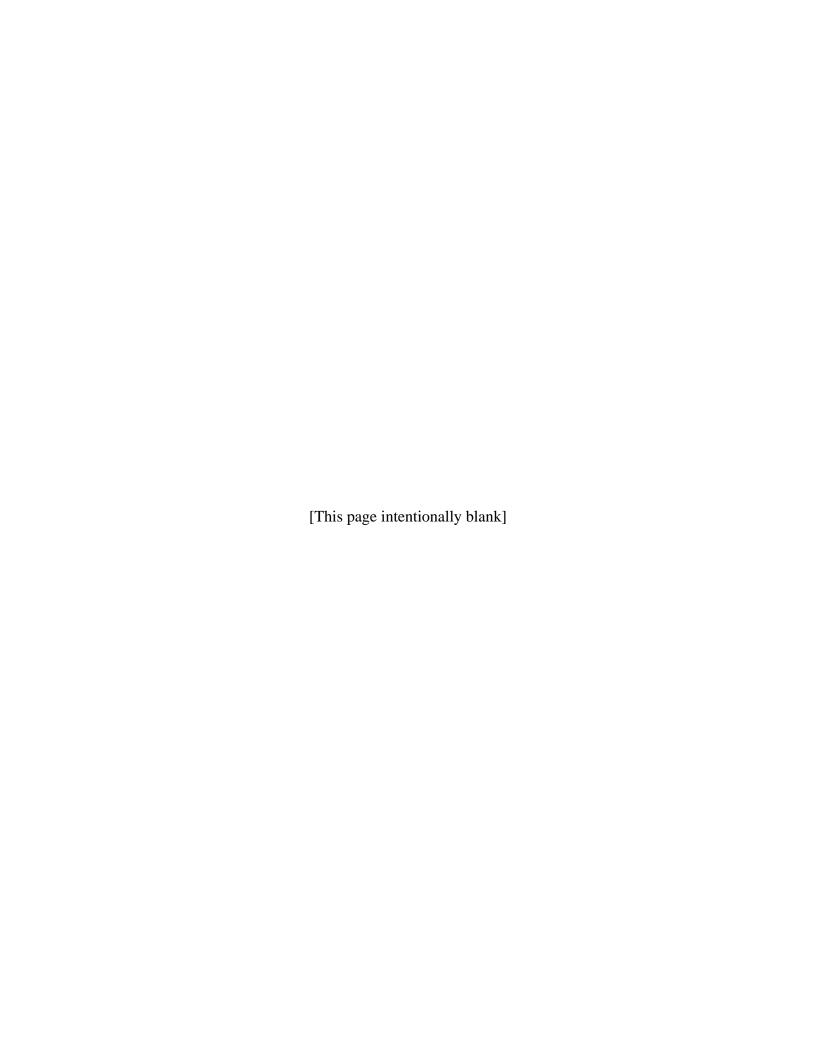
The Japanese, on the other hand, appear to be growing more worried about the possible implications of the steady expansion of Chinese military power. While domestic Japanese politics still militate against radical changes in interpretations of Article 9 of Japan's constitution – let alone amending that article – there are signs that the Japanese are again viewing renewed long-term competition for regional dominance with China, possibly a belligerent one, with growing concern.

For the past 60 years, the United States has been Japan's security guarantor. This has fed into a strong Japanese proclivity to think "let the Americans handle it" with regard to military threats. This is turn has tended to stultify practical Japanese thinking on defense issues. In effect, Japan has been a "free rider" in large measure as a U.S. ally. U.S. officials until now have been content to accept this in order to have a compliant ally in East Asia.

As a consequence, neither Japanese nor U.S. policymakers have given much thought to a possible future world in which the Japanese 1) assume much greater responsibility for their own defense; and 2) consider much tougher military responses and counters to hostile Chinese threats and actions than either today's U.S. or Japanese senior leaders contemplate.

This paper explores some ideas about such a different, darker world.

<sup>&</sup>lt;sup>1</sup> For an excellent description of the language of discourse employed by U.S. policymakers across the political spectrum concerning U.S.-China relations, see James Mann, *The China Fantasy: How Our Leaders Explain Away Chinese Repression*, (New York, NY: Penguin Group (USA) Inc., 2007).



# I. INTRODUCTION

# REARMED JAPAN: WHAT COULD IT LOOK LIKE?

Significant changes in the geostrategic environment of Northeast Asia as well as in the domestic politics of Japan since the end of the Cold War suggest the serious possibility that Japan will play a larger role in the international arena in the future, one more commensurate with its latent national power. Whereas the core element of Japanese foreign and security policy since the end of World War Two has been its alliance with the United States – and its near-complete dependence on the United States for its defense – Japan in the future may choose to adopt more vigorous security policies. These may afford it substantially more political independence based on its own military capabilities, but this may also significantly increase its value to the United States as an ally in terms of being able to cope with a rising, potentially belligerent China.

The principle enabler of such a policy choice would be a significantly larger military, one more reflective of Japan's actual economic power. Since Japan technically has not had a "military" since its defeat in 1945 (the missions and capabilities of the "Japanese Self-Defense Force (JSDF)" are strictly circumscribed by Article 9 of the Japanese constitution) and has renounced the right to engage in war, there has been little thought given to what a much more capable, "real" Japanese military, which the Japanese economy could easily underwrite, might look like. Most discussion about possible Japanese rearmament has tended to revert to debates over various possible political-military scenarios and broad generalities, principally because after 60 years the specter of a more independent and rearmed Japan has been outside the mental frame of reference for most U.S. (and Japanese) strategists.

As a result, it has been difficult to generate much coherent or specific discussion of what a rearmed Japan could look like, i.e., what military forces and capabilities Japanese economic and other elements of national power could create and sustain, should the Japanese government choose to invest in a much larger military capability in response to various foreign and domestic stimuli. Similarly, there has been little thought about the advantages and disadvantages that could accrue to the United States from such a development in Japan.

A principal factor that makes this subject timely is the emergence of China as an extraordinarily rapidly rising power in Northeast Asia, a rise made even more spectacular and fraught with implications given its size in both economic and demographic terms. For the past two decades, this has taken the form principally of extraordinary economic growth. Lately, however, China has devoted an increasingly proportion of its resources to developing the military component of its "comprehensive national power (CNP)." Indeed its defense budget has seen uninterrupted double-digit annual increases since at least the early 1990s. Though admittedly starting from a

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<sup>&</sup>lt;sup>2</sup> For a good discussion of the Chinese political concept of CNP, see Michael Pillsbury, *China Debates the Future Security Environment*, (Washington, DC: National Defense University Press, 2000), p.203-258.

low base, by the late-2000s, China has acquired powerful military capabilities, including substantial orders of battle in each of the components of the People's Liberation Army (PLA). While this is in some sense normal for a powerful country recovering from generations of excessive weakness, China's consistent lack of transparency concerning its comprehensive military modernization has been troubling, as stated repeatedly by Secretaries of Defense and other U.S. leaders.

China's rising power, and increasing political assertiveness in various forums, has certainly captured the attention of senior Japanese leadership. While Japan and China long have struggled for dominance in terms of regional influence, the combination of China's centuries-old weakness, Japan's devastating defeat in World War Two, and the overriding global nature of the U.S.-Soviet Cold War competition served to render their historical regional competition largely dormant for the past half century. Now, however, all the elements are in place for resumption of that competition.

North Korea's firing of a ballistic missile over Japan in 1998 was a jolt to the Japanese leadership and public. It provided a stark reminder of the country's near-complete vulnerability to foreign attack, absent American defense, which against ballistic missile attack was then essentially non-existent. This sense of vulnerability was aggravated further in 2006 when North Korea conducted a nuclear test. Subsequent suggestions that a North Korean nuclear strike against Japanese territory might not be met with an American retaliatory nuclear strike, but conventional precision strikes instead, further served to increase Japanese security concerns.<sup>3</sup> Increasing numbers and kinds of Chinese military operations ever closer to Japan have only reinforced these.

Further aggravating these worries, the United States post-9/11 has appeared to be nearly exclusively concerned with prosecuting the struggle against the multiple strands of violent Islamic extremism. The unending campaigns in Iraq and Afghanistan, coupled with recurrent public discussion over whether the U.S. military is "over-stretched," and thus by implication unable to deal with major threats in other theaters, have created additional concerns in East Asia about whether the United States is able and/or willing to remain meaningfully engaged in that region over the long-term. Whether that is actually the case or not, the perception of lagging U.S. interest or ability to maintain its previous level of regional influence and commitment is already significantly affecting regional security discussions.

These events and trends have served to make it increasingly possible for mainstream Japanese political figures, and other public figures concerned with national security issues, to talk about matters like acquiring offensive military capabilities, collective self-defense, and even nuclear

<sup>3</sup> Japanese leaders were quite dismayed in 2007 when unnamed U.S. officials suggested that in the event of a North Korean nuclear strike on Japan, the U.S. might respond with heavy conventional precision strikes rather than nuclear weapons. One senior Japanese official stated his private opinion that that would end the U.S.-Japan security alliance.

weapons that had been considered hitherto taboo. Increasing concerns about the reliability of American security guarantees have served to heighten the Japanese internal debate.

Given these considerations, one then can imagine a security environment in 15-20 years in which Japan has undertaken over the preceding two decades (i.e., having taken the decision towards the end of the 2000s) to become a "normal nation" once again, in the sense of being able to provide substantially for its own defense against external threats and to have invested appropriately in the capabilities and capacities required to do so.

Such a Japan could potentially choose to acquire the military capabilities to defend itself independently. Alternatively, it could choose to maintain a close security relationship with the United States (and possibly other democratic states such as Australia or India), though that relationship could be qualitatively quite different than that of 2008, with various advantages and disadvantages that could accrue from such a changed alliance relationship for both countries.

In thinking about such a future world, clearly the most stressing case for Japan would be one in which China not only steadily continued to increase both its economic *and* military power, but embarked on a deliberate, belligerent long-term strategy to establish regional dominance over Japan, i.e., determined to reduce Japan as a strategic competitor over the long run, or put a different way, establish substantive suzerainty over Japan. Such a strategy likely would comprise diverse elements, including a major military component.

Were the United States to remain a close ally but one that remained heavily committed in terms of military and intelligence resources elsewhere than East Asia, and/or one that substantially had reduced or been forced to reduce those resources as a result of domestic political considerations or fiscal pressure, such a future world would be even more stressing from a Japanese perspective.

This paper postulates such a dark future world in which a rising, malevolent China seeks the diminishment or reduction of Japan as a strategic competitor, and examines how Japan might react to it. For the purposes of this paper, it is assumed that Japan and the United States maintain a close alliance relationship. However, for various reasons, Japan is far more willing and able to confront Chinese hostility, and would provide the lion's share of military resources to do so—although it could continue to count on important U.S. support, principally intelligence and missile defense.

As such, this paper will consider *from a Japanese perspective* how Japan might approach the difficult future security environment postulated. This is not to assert that the ensuing discussion accurately depicts the way actual Japanese leaders would approach the strategic problem. But it may serve to illustrate the scale and scope of Japanese actions and policies – absent today's constitutional and political constraints – that could be possible.

This paper is not concerned with how past history, future events, political-military factors, domestic motivations, or the nature of Japanese decision-making might drive or influence an actual Japanese decision to rearm. It does not predict that Japan will significantly increase the

size and capabilities of its military forces, or that it will free itself from the constitutional constraints that have to date limited its forces to strictly self-defensive roles and missions. Nor does it in any sense predict what form such Japanese rearming would take. Rather, the paper will seek to give a reasonably detailed depiction of what Japan *could* do in terms of rearmament, based on its economic power, over the next 15-20 years should it choose to do so, and what strategic approaches it *could* consider if confronted by a powerful, belligerent China.

#### How to Think about the Problem

The central question is what hardnosed Japanese leaders could do to deter a belligerent China bent on crippling Japan as a strategic competitor, and if necessary defeat such Chinese efforts through the use of large-scale military operations, if they were to act as other national leaders under major threat might, i.e., not fettered by the unique circumstances of post-1945 Japan.

Japanese strategic/military planners necessarily would have to consider these major factors:

- Japan's geostrategic position;
- The potential Chinese military threats to Japan; and
- Alternative Japanese strategic approaches and the kinds of military capabilities and operations these might entail.

This question is inherently complex, with many interconnected variables as well as many unknowns (and unknowables). Thus it is first necessary to bound the problem considerably by making several assumptions regarding factors that are not central to the main question. And, obviously, these must be internally coherent if the assessment is to be plausible.

key assumptions described later will bound the discussion of the complex problems that a Sino-Japanese strategic competition with a heavily military aspect would present. They are made to allow the reader to consider a world in which:

- Japan has affirmative reasons to build up substantial military capabilities and capacities for
  independent military operations, even though the U.S.-Japanese security alliance is assumed
  to remain close. This is in order to obviate the contemporary notion that Japan will always
  rely on the United States to directly defend it. In other words, it eliminates today's Japanese
  leadership option (and apparent preference) simply to say, "Let the United States handle it."
- The U.S.-Japanese security alliance remains strong, but Japan is sufficiently concerned for various reasons about U.S. ability to provide sufficient timely security assistance in the event of crisis or conflict with China that it is motivated to acquire independent potent military capabilities and capacities. This permits consideration of the case where the United States continues reliably to provide critical warfighting support, e.g., intelligence, space-based services, etc., even while tolerating (or even encouraging) hard-nosed Japanese responses to

the Chinese threat. As a convenient by-product, Japan would not need to divert large resources to acquiring its own independent capabilities and expertise in those areas.

- Japan itself no longer feels constrained from having normal military forces and policies by its constitution nor encumbered by contemporary real-world historical or domestic political factors. The details of how this might have come to pass over a period of time are not material for purposes of this paper. It is only necessary to imagine Japan acting as a normal nation might were it to face a serious long-term threat to its national security, since there are various plausible ways this actually could come to pass in the real world.
- The United States determines that it is in its own interest that Japan assume a much larger share of the responsibility for its own defense, and that it is past time for Japan to act as a "normal nation." There could be various reasons for such a stance, such as a desire to ameliorate the "free rider" problem that arguably has imposed excessive defense costs on the United States since the end of the Cold War. The United States also might consider it useful to have a strong independent actor in East Asia that can complicate Chinese strategic planning in a manner perhaps analogous to France's independent military (including nuclear) forces during the Cold War complicating Soviet planning.

#### **KEY ASSUMPTIONS**

Some of the assumptions below are of course artificialities and not predictive, but keep in mind that the purpose of this paper is to have the reader consider what a world in which a militarily powerful Japan capable of independent action might look like.<sup>4</sup>

#### **Time Horizon**

This paper assumes a time horizon of 15-20 years. Over such a time period, Japan would easily be able to acquire and integrate a much larger military force structure with many new capabilities and capacities. Increasing its defense budget to an unremarkable 3% of GDP over, say, a 5-10 year period, would result in a tripling of military spending at a rate that would not be inordinately inflationary, and would facilitate the steady expansion of support facilities (e.g., basing) and activities (e.g., training, personnel development, etc) that would be necessary to support an expanded military. Smooth expansion of spending would facilitate long-term defense industrial base planning and help achieve economies of scale in procurement.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> In keeping with the discussion of a future "normal" Japanese military, this paper will employ conventional terms like "Navy" or "Air Force" throughout rather than the somewhat insipid "Self-Defense Force."

<sup>&</sup>lt;sup>5</sup> A major increase in the size and capabilities of Japan's military necessarily would take several years if the decision were made to do so in a deliberate, well-planned way (as opposed to under emergency conditions). Assuming a political green light from the Government of Japan (GOJ), it would take time to ramp up the defense budget significantly and steadily without inducing fiscal shock, budgetary distortions, inflation, and other unpleasant economic side effects. Moreover, it would take some considerable time to ramp up the normal support functions such as production facilities, expanded basing and, above all, personnel and training pipelines.

#### **Taiwan and Korean Situations Resolved**

The contemporary Taiwan and Korean scenarios drive today's military planning to a very high degree. This is true both in the US Pacific Command (PACOM) and in Tokyo, where Japanese participation (even if only support) is an important factor in U.S. and combined contingency planning. While this may be entirely appropriate today, one undesirable consequence is that planners have little incentive to consider the longer-term future in which such scenarios may no longer be relevant. Should these scenarios no longer be the drivers that they are today, the kinds of military capabilities and capacities that might be needed for future operations in East Asia and the western Pacific could be substantially different than those required in 2008.

According, given that Japanese planners would be faced with analogous consequences for their planning and that the focus is on Japanese planning vis-à-vis a hostile China, it is assumed that Taiwan has been peacefully incorporated into China as a Hong Kong-like "Special Administrative Region" by the mid-2010s; that the PLA has substantial air, maritime, and intelligence units stationed in Taiwan, but no significant ground units (in other words, a "light footprint"); that the Korean peninsula has been peacefully reunified and denuclearized; and that the United Korea is largely turned inward, consumed with the task of dealing with the consequences of reunification and the task of rebuilding the ex-DPRK.

#### **Continued Strong U.S.-Japanese Alliance**

Both the United States and Japan maintain a continued strong *political* commitment to their security alliance. However, the United States is increasingly focused in geographic areas other than East Asia. Moreover, the U.S. military gradually declines in size as a function of fiscal and domestic political constraints and reduced threat perceptions, and continues to move to an expeditionary force philosophy, steadily reducing both its forward-based forces worldwide (though maintaining its forces in Japan) and the number of "places" to which it has routine access.

Vis-à-vis Japan, the United States *de fact*o moves towards a "swing" policy under which it undertakes to shift forces to Japan as necessary should defense of Japan require it. While Japan is not particularly pleased with the reduction in U.S. military presence in theater that such a policy entails, it essentially has no choice but to accept U.S. assurances that this does not change the U.S. commitment to their alliance, since Japan has no real alliance alternatives in a dangerous neighborhood. At the same time, this becomes a principal motivator for Japan's determination to assume greater responsibility for its own defense.

# Solid U.S. and Japanese Interoperability

The U.S. and Japanese militaries continue to improve their interoperability both materially and operationally, with particularly emphasis on intelligence and warning (I&W), ballistic missile defense, and joint and combined operations.<sup>6</sup> By 2020, they are able to conduct joint and

<sup>&</sup>lt;sup>6</sup> As of the mid-2000s, the Japanese are just beginning really to think about joint operations, the components of the Self-Defense Forces having had little experience operating with each other. Real combined operations – apart from

combined operations competently, which lends added credibility to U.S. assurances that in the event of threats or actual attacks on Japan, U.S. forces (assuming their availability) would quickly be able to enter theater and operate essentially seamlessly with their Japanese counterparts.<sup>7</sup>

#### **Article 9 Constraints No Longer Apply**

Various events and trends after 2010 cause Japan to eliminate the Article 9 constraints that forced it to "renounce war" as an instrument of national policy. A wholesale amendment is assumed rather than the agonizing splitting of hairs over "interpretations" of the constitution that have characterized the small expansions of authorized military operations since the end of the Cold War. Thus, the future Japan considers itself to have legitimate rights to prepare for its collective self-defense, including independent military actions of all types such as offensive operations, use of space for military purposes, and foreign military sales. Senior Japanese leadership further reserves the right to acquire nuclear weapons if circumstances dictate, though this of course remains a closely guarded national secret.

#### **Japanese Economy Supports Sustained Military Expansion**

The Japanese economy can easily support sustained military expansion over a prolonged period. The Japanese defense budget has been limited by constitutional interpretation to about 1% of GDP since the Japanese Self-Defense Force (JSDF) was formed in 1954. With the assumed removal of such a constraint, it is not unreasonable to postulate that Japan could easily increase that percentage to 3-4% over a reasonable period, say 5-10 years, and do so at a rate of increase that would preclude creating excessive inflationary pressures. Considering that this would more than triple already significant military expenditures, and that the continuing close U.S.-Japanese security alliance obviates the necessity for Japan to acquire many of the very expensive systems and infrastructure that underpin U.S. global military capabilities, this would enable a very considerable increase in Japanese military capabilities and force structure without leading to objections that doing so would "break the bank."

# **Japanese Military Capable of Sustained Independent Operations**

The Japanese military is capable of a wide array of sustained independent operations, subject to the following sub-assumptions. It has acquired robust operational logistics, i.e., it can resupply and rearm expeditionary naval forces, has a large aerial refueling capacity, and sufficient

selected exercises like "Annual Exercise" (ANNUALEX) and specific tasks like underway replenishment are not much further along. The establishment of a combined air defense center at Yokota Air Force Base in 2007 was an initial step to improve combined operations with regard to defense against air and missile threats to Japan.

<sup>&</sup>lt;sup>7</sup> One of the factors that makes this is a somewhat unrealistic assumption are the great difficulties caused by language. Most Japanese military personnel speak and understand English poorly (though written comprehension is somewhat better among many officers). This may be ameliorated to the extent that future warfare becomes ever more automated and human intervention relying on speech becomes less important.

stockpiles of supplies, especially precision ordnance, to sustain a lengthy conflict. Through a sustained program of training, exercising and professional military education, it has developed the staff expertise and mechanisms to direct such operations.

#### Strong, Stable China

Real world projections of the domestic political stability of China in 15-20 years range from a weak, unstable, even chaotic country to a strong, stable state that more or less continues on its current domestic political, economic, and military trajectories. This paper assumes the latter China.

#### **China Aims to Dominate Japan**

China and Japan have competed for dominance in East Asia at least since the Meiji era. While many argue today that the contemporary "globalized" world, especially the aspect of nearinstantaneous worldwide communications, renders the strategic competition framework of the past conceptually obsolete, this paper postulates that "there is nothing new under the sun" and that this framework remains deeply relevant, particularly in East Asia. Accordingly, it assumes that contemporary China and Japan both view the other as its main long-term competitor in East Asia in all dimensions; that today's circumstances represent a de facto resumption of the historical competition that has been suppressed artificially since 1945; and that China conceives of Japan as presenting a continuing latent threat whose potential remains mostly untapped only because of artificial constraints that are not necessarily permanent. Consequently China considers itself to have a major but perishable strategic opportunity to improve its competitive position in East Asia by virtue of the confluence of its strong economy and stable regime, Japanese economic and demographic distress, a comparatively weak Japanese military, and the distraction and reduced commitment of the United States. As a result, Chinese leadership decides in the early 2000s to undertake a deliberate strategy to sap Japan's ability to constitute a longterm threat.

#### Military Considerations Trump Economic and Trade Relations

Some will object that "war is no longer possible" in today's globalized world. Notwithstanding that similar claims were made 100 years ago, and anticipating the counter that "the world is different now," it is assumed that in the event of conflict, military considerations, as they have historically, will trump ordinary matters of economics, financial flows, and trade relations between China and Japan, and between China and the United States. Moreover, without going into the details, since these are well outside the scope of this paper (and the competence of the author), it is not difficult to postulate a future world in which economic and trade relations between China and both the United States and Japan decline steadily over a period of years as

<sup>&</sup>lt;sup>8</sup> Actually such competition goes back many centuries, but an accurate historical analysis is beyond the scope of this paper, and in any event is not really relevant to the central question it aims to address.

each seeks alternative, less risky markets, thereby lessening the mutual trade relations that some would argue could inhibit the outbreak of conflict.

#### **RESEARCH QUESTIONS**

With these key assumptions in mind, we will now take on the role of senior Japanese leadership determined to prevail in a sustained strategic competition, one likely to have major military dimensions, with a powerful, bellicose China. Among the matters to be considered are:

- What is Japan's geostrategic position?
- What strategic/military problems does a hostile China pose for Japan?
- What asymmetries in their respective strategic positions could Japan exploit against China?
- What alternative strategic/military approaches could Japan use to deter China, and failing deterrence, to prevail in a conflict? What capabilities would be required?
- How might a powerful Japanese military capability affect the U.S.-Japanese security alliance?

A Japan with significantly larger forces and greater capabilities necessarily would impact regional political and security dynamics significantly. It could also alter the U.S.-Japanese security alliance considerably, whether for better or worse. Given the potential implications and ramifications for U.S. national security and defense strategy of substantial Japanese rearming, the Department of Defense (DOD) ought to examine them with some attention.

However, it appears that DOD continues to assume uncritically that the U.S.-Japan security alliance essentially will maintain its present state and form indefinitely. Thus it is not seriously assessing the potentially major consequences of a more independent and militarily potent Japan in terms of both the strategic risks and opportunities for the United States that could ensue.

This paper is an initial attempt to do so.

# II. JAPAN'S GEOSTRATEGIC POSITION

# **GEOGRAPHIC FACTORS**

Japan is an offshore country with four main islands and numerous smaller islands to the north, west and south of the "mainland." Its neighbors, though separated by bodies of water, on the Asian continent are Russia, Korea Philippines. <sup>10</sup> It continues to have minor territorial differences with each of its neighbors concerning disputed small islands. <sup>11</sup> Japan also has had disputes at various times with neighbors over claimed Exclusive Economic Zone (EEZ) limits. <sup>12</sup> A high proportion of its energy imports comes from the Middle East via a 12,000 km sea route that passes through multiple potential chokepoints.

Japan continues to face considerable hostility from China, Korea and the Philippines, stemming from its brutal treatment of them during the first half of last century. It has generally cool relations with Russia, with a history of conflict with the latter, including the Soviet declaration of war and seizure of Japanese-claimed territory in the closing days of World War Two. Such emotional elements are the backdrop for contemporary political conflicts over territorial/EEZ claims as well as other issues.

#### **Heavy External Resource Dependence**

Japan is poorly endowed with natural resources, both absolutely and relative to its population. "Japan's extreme dependence on virtually all major types of raw materials and energy has been extensively documented. Japan differs from almost all the other major industrial countries in this respect." Only about 12% of its land is arable. <sup>14</sup> Japan depends heavily on imports for its

<sup>&</sup>lt;sup>9</sup> The four main islands are Honshu, Kyushu, Hokkaido, and Shikoku.

<sup>&</sup>lt;sup>10</sup> The west coast of Kyushu lies about 500 miles across the East China Sea from China's east coast.

<sup>&</sup>lt;sup>11</sup> These small island disputes concern the four southernmost Kuriles (Russia); the Senkakus at the end of the Ryukyus chain (PRC, but also Taiwan) and multiple islands in the Tsushima Strait and Sea of Japan (Koreas).

<sup>&</sup>lt;sup>12</sup> Japan and South Korea agreed in 1974 on a Joint Development Zone for jointly exploiting undersea resources, though their dispute over Takeshima/Dokdo Island in the Tsushima Straits is becoming increasingly tense, and has the potential to inflame other issues between them. Japan and China apparently have just concluded an agreement to jointly develop natural gas fields in the East China Sea, thereby resolving a dispute over conflicting EEZ claims. "China, Japan to announce deal on East China Sea gas – foreign ministry," <a href="http://www.xe.com/news/detail.htm;jsessionid=FD62D02FF385B14B61CCA10944D55733?articleId=16466">http://www.xe.com/news/detail.htm;jsessionid=FD62D02FF385B14B61CCA10944D55733?articleId=16466</a>, and Chris Nelson, "What Folks Missed with Hu/Fukuka," The Nelson Report Samuels International Associates, Inc, May 12, 2008.

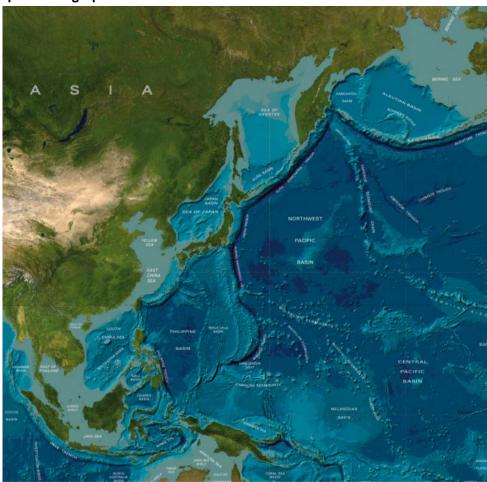
<sup>&</sup>lt;sup>13</sup> Charles J. McMillan, *The Japanese Industrial System* (3<sup>rd</sup> edition)(New York, NY: Walter de Gruyter, 1996), p.28.

<sup>&</sup>lt;sup>14</sup> See https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html.

primary energy supply, including near-total import-dependence for oil and natural gas, which account for about 60% of total Japanese energy consumption.<sup>15</sup> Indeed,

[Japan] is devoid of oil, gas and coal resources, and successive governments have expressed concern regarding its dependence on fossil fuels. This shortage of natural resources is exacerbated by food dependence which is one of the highest in developed countries. Japan therefore finds itself in a situation whereby, ordered to feed itself, the country has no alternative but to depend on the transformation and associated services industry and, for this, its energy requirements are vital. <sup>16</sup>





<sup>&</sup>lt;sup>15</sup> See http://www.areva-np.com/common/liblocal/docs/press/DP Japan 04 2008 va.pdf.

<sup>16</sup> Ibid.

 $<sup>^{\</sup>rm 17}$  Image reproduced form the GEBCO World Map,  $\underline{\text{http://www.gebco.net}}.$ 

#### **Transportation Infrastructure**

Japan's ground transportation infrastructure is heavily driven by the mountainous nature of its topography. <sup>18</sup> Its government has pushed railways hard, from their initial availability in the late 19<sup>th</sup> century on, due to high import dependence, especially in energy. While there is a fairly dense railway network in contemporary Japan, only a relatively small proportion is standard gauge (as opposed to narrow-gauge) track that affords high freight carrying capacity. <sup>19</sup> The renowned high-speed (300 kph) *Shinkansen* passenger trains run on a single special-purpose route on Honshu. There is a fairly sparse network of high-speed expressways, which since the 1960s have surpassed the railways in handling most domestic freight. (See Map 2) But, apart from these expressways, roads in Japan are mostly small and very slow by U.S. standards, a partial function both of the large proportion of mountainous terrain that makes road construction difficult and expensive and the relative scarcity of usable ground that has driven Japanese cities and towns to be densely populated with narrow roads, and thus not amenable to high-speed road traffic.

Two aspects of this ground transportation infrastructure should be noted. First, given its relative sparseness, it is particularly vulnerable to nodal attack against a relatively small number of targets.<sup>20</sup> Blockage of key nodes could severely impede ground movement of personnel and materiel, especially in terms of movement west of the Kanto Plain (Tokyo region). Second, the rail and road networks have an exceptionally large number of tunnels, many kilometers in length, that can be blocked, but that also could offer natural hardened sites to defend and hide key military assets as well.

In terms of sea transport, a large percentage of Japan's imports enter through a small number of large ports: Chiba, Kawasaki, Kobe, Mizushima, Moji, Nagoya, Osaka, Tokyo, Tomakomai, and Yohohama. While the country maintains stockpiles of strategic materials, including fossil fuels, the limited number of ports and associated cargo handling equipment would make these attractive targets in a major conflict. Japanese strategists should therefore place a considerable premium on the defense of these ports and their approaches, particularly against undersea attackers and ballistic missiles.

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<sup>&</sup>lt;sup>18</sup> The plains of Japan are few and small and cover only about 29% of the total land area. Most plains are located along the seacoast and are composed of alluvial lowlands, diluvial uplands, and low hills. See <a href="http://www.nationsencyclopedia.com/Asia-and-Oceania/Japan-TOPOGRAPHY.html">http://www.nationsencyclopedia.com/Asia-and-Oceania/Japan-TOPOGRAPHY.html</a>.

<sup>&</sup>lt;sup>19</sup> See <a href="http://en.wikipedia.org/wiki/Rail transport in Japan">http://en.wikipedia.org/wiki/Rail transport in Japan</a>. Only 3,204 km out of 23,596 km (2005 figures) are standard gauge track.

<sup>&</sup>lt;sup>20</sup> This vulnerability is a matter that would seem to rate significant Japanese government attention in terms of homeland defense preparedness.

<sup>&</sup>lt;sup>21</sup> See <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html">https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html</a>. Note that Tokyo, Kawasaki, Yokohama and Chiba all lie on Tokyo Bay, which has a relatively narrow entrance.

#### **Blocking Location**

Japan's geographical location puts it astride Chinese, Russian, and Korean maritime access routes into the Pacific. To the north, the shipping of all three of these countries have to transit through narrow straits between Sakhalin Island and Hokkaido, then again through the Kurile Islands, or else enter and exit the Sea of Japan either through the La Perouse Strait separating Hokkaido and Honshu or the Tsushima Strait separating Japan and Korea. To the south, the Ryukyus island chain stretches from southern Kyushu to within 100 miles of Taiwan. The Senkaku Islands, currently administered by Japan as part of the Okinawa Prefecture but claimed by China as belonging to the "province of Taiwan," lie about 100 miles north of the westernmost Ryukyus. In effect, then, the Japanese archipelago potentially constitutes a geographic barrier to Chinese (and Korean and Russian Far Eastern) shipping in the same way that Great Britain's location did vis-à-vis Germany during the world wars, and that the Greenland, Iceland, and the United Kingdom (GIUK) gap potentially could have had in impeding the passage of Soviet naval traffic into the Atlantic Ocean in the event of a major war with NATO.

#### **DEMOGRAPHIC FACTORS**

Japan is under severe demographic stress. Its population has been decreasing since peaking in 2005.<sup>24</sup> This has clear implications for the future Japanese economy, certainly in the sense of public finances, but also in terms of creating strong incentives to move to capital- rather than labor-intensive investments to the maximum extent possible.<sup>25</sup> This would also pertain to the military, in terms of putting premiums on guided weapons, robotics, automated systems and non-personnel-intensive concepts of operations (CONOPS). Again perhaps fortuitously, future warfare trends against conventional opponents (i.e., in non-irregular warfare) point to the increasing importance of various technologies that will underlie just such systems and CONOPS, while Japanese technological strengths likely and conveniently will confer major advantages in addressing those trends.

At the same time, it would wrong to overplay the demographic factor in terms of Japan's ability to support a potent military. While its population is indeed shrinking, and its demographic profile shows a strong and rapid aging trend, the 16-49 year old male cohort today is still almost 28 million, with about 23 million being evaluated fit for military service. The comparative female

<sup>22</sup> Japan claims the four southernmost Kurile Islands, occupied by the Soviet Union after World War 2. See <a href="http://mondediplo.com/2001/09/06kuril">http://mondediplo.com/2001/09/06kuril</a>.

<sup>&</sup>lt;sup>23</sup> See http://en.wikipedia.org/wiki/Senkaku Islands.

<sup>&</sup>lt;sup>24</sup>For Japanese demographic data, the "JGuide: Stanford Guide to Japan Information Resources" is an excellent source at <a href="http://www.stat.go.jp/English/data/handbook/c02cont.htm">http://www.stat.go.jp/English/data/handbook/c02cont.htm</a>.

<sup>&</sup>lt;sup>25</sup> Indeed, Japanese business publications already discuss things like the need to "mechanize some repetitive, low skill jobs." See, for example, <a href="http://www.japaneconomynews.com/category/demographics/">http://www.japaneconomynews.com/category/demographics/</a>, and "Japan's Humanoid Robots," *The Economist*, December 25, 2005.

figures are about 27 and 22 million, respectively.<sup>26</sup> Even if the replacement cohort in 20 years were to be 20-25% smaller than in 2008, that still would leave a large pool of potential military members.<sup>27</sup> Moreover, today's JSDF is all-volunteer. In the event of an actual strategic danger from a hostile China, Japan would have the option of imposing mandatory national service to man an expanded military.

## **ALLIANCES**

Practically speaking, Japan relies almost exclusively for defense on its security alliance with the United States. There have been periodic discussions of closer security relations and various symbolic declarations and military exercises between or among Japan and, e.g., Australia, India, and Singapore. However, the fact remains that no actual or potential ally other than the United States is in a position either geographically or in terms of military capabilities to render Japan timely effective assistance in the event of an open Chinese attack. Thus strategically Japan has few realistic options, besides today's heavy reliance on the United States, other than to take on a much larger share of its own defense burden.

We turn now to the implications of Japan's choosing that option, starting with the characterization of possible strategies against Japan available to a hostile China.

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<sup>&</sup>lt;sup>26</sup> CIA World Factbook.

<sup>&</sup>lt;sup>27</sup> Japan's population is predicted to shrink by 20% by 2050 if current trends persist. See <a href="http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/06/01/cnjapan01.xml">http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/06/01/cnjapan01.xml</a>.

# III. Possible Chinese Strategy against Japan

## **PRC COERCION STRATEGY**

China could employ a mix of coercive political, economic, and military elements in a deliberate, sustained campaign to seriously damage Japan by diminishing its power in one or more dimensions, preferably all, thereby establishing the basis for long-term regional dominance.

If successful, the concomitant demonstration of U.S. inability to protect its most important Asian ally could well do catastrophic damage to U.S. influence in East Asia. Politically, the U.S. military likely would find it very difficult to negotiate access to facilities in intimidated regional countries that saw China as the dominant regional power. At the very least, then, it would likely render U.S. power projection in Asia vastly more difficult by pushing its military forces and bases from Japan back to Guam and other island bases further to the east.

China of course would be delighted if such a coercion strategy resulted effectively in "Finlandization" of Japan (defined as Japan having no larger or more capable military forces than today, and an end to the U.S.-Japan security alliance) without actual armed conflict. But many of the coercive measures suggested below would also serve effectively as precursors and preparatory steps for an open Sino-Japanese war should Japan strongly resist coercion.

#### **Coercive Political/Diplomatic Measures**

China would work methodically towards the gradual political and diplomatic isolation of Japan. It has considerable experience with this kind of strategy. Since the Beijing regime's recognition as the sole legitimate government of China in 1971 and the reestablishment of diplomatic relations with the United States in 1978, China has assiduously followed a comprehensive strategy to delegitimize Taiwan in every respect by using a mix of incentives and disincentives to constrain foreign countries' political and economic relationships with the island. This strategy has met with considerable success.

China has used a similar strategy, though subtler fashion, in more recent times to increase its influence in various multilateral groups, while simultaneously trying to exclude or diminish the influence of Japan in such entities. As Australian strategists have noted:

China is projecting an increasingly sophisticated array of counter-strategies to neutralize the effects of JADSC [Japan-Australia Declaration on Security Cooperation]-type arrangements as the future model for Asian security. It is calibrating selective involvement in institutional initiatives – such as the East Asian Summit and the ASEAN Regional Forum – in ways designed to gradually marginalize the U.S. brand of bilateral or multilateral security politics. It is simultaneously, however, shaping its own set of bilateral and multilateral politico-security relationships – with

Thailand, Burma, and the Shanghai Cooperation Organization – and probing for additional opportunities for strategic interaction previously not open to it (weapons sales to contemporary Indonesia come to mind) as part of a broader pan-Asian strategy to influence, if not to decide, the direction of most key security trends there. <sup>28</sup>

A future aggressive China could reinforce these efforts by pursuing closer regional security ties with Russia and a unified Korea. Such ties could easily have a military dimension, such as granting Chinese air and/or naval access to facilities bordering on the Sea of Japan. By expanding the potentially hostile "frontage" vis-a-vis Japan across that body of water, Japan's defense problems would be increased significantly. Not only would the axes of approach be considerably expanded for attacking forces, but a significantly increased PLAAF and PLAN presence on and over the Sea of Japan would compel corresponding Japanese defensive activity, thereby increasing costs, complicating basing requirements, and spreading defensive assets more thinly.

China could complement such efforts by increased employment of "lawfare," that is, the deliberate employment and pushing of international law and international agreements to regulate and control growing maritime areas. This could be particularly effective given the geography of Southeast Asia, with its archipelagic nations and numerous straits through which a huge proportion of global seaborne trade pass, including, crucially, a large share of Japanese commerce—particularly energy imports. The provisions of the United Nations Convention on the Law of the Sea (UNCLOS) already provide for substantial littoral state rights to regulate activity in their EEZ in various aspects. There are growing contemporary international movements to increase monitoring and regulation of maritime traffic in the name of maritime domain awareness, safety of navigation, environmental protection, and anti-terrorism and anti-piracy. While these measures are not so important in and of themselves, they provide potential pretexts for the Chinese use of military force ostensibly to exercise rights and enforce constraints "legally." At the same time, they might enable or provide cover for various kinds of military preparations and activities that the Chinese military could eventually employ should China decide on direct military coercion of Japan. This will be further explored later.

#### **Coercive Economic Measures**

Various economic coercion measures with military overtones might include:

- Forcible enforcement of maximalist Chinese EEZ claims in the East China Sea, where China has conflicting claims with Japan;
- Encouragement of expansive Korean (and Russian) EEZ and territorial waters claims vis-a-vis Japan in the East China Sea and the Sea of Japan;

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See <a href="http://www.globalcollab.org/Nautilus/australia/apsnet/policy-forum/2007/the-japan-australia-joint-declaration-on-security-cooperation-and-asia-pacific-strategic-geometries/">http://www.globalcollab.org/Nautilus/australia/apsnet/policy-forum/2007/the-japan-australia-joint-declaration-on-security-cooperation-and-asia-pacific-strategic-geometries/</a>.

- Interference with Japanese maritime commerce and civil aviation in areas proximate to China, e.g., merchant shipping in the South China Sea;
- Clandestine support of third party harassment (e.g., pirates) of Japanese shipping throughout the Southeast Asia region (including in Indonesian and Philippine waters);
- Sabotage of Japanese undersea energy infrastructure (UEI), especially in contested EEZ areas;
- Sabotage of Japanese undersea information infrastructure (UII);<sup>29</sup> and
- Use of proxies (probably Korean) for small-scale chemical-biological-radiological attacks within Japan.<sup>30</sup>

The purpose of these measures would not be so much to force Japanese decisive policy changes as to affect the cost-benefit calculus (including effects on public opinion and thus domestic political support) of Japanese leaders caught between the choice for accommodation or resistance to a rising China. Many of these measures would also create opportunities to provoke or induce deliberate military incidents that China could modulate to keep increasing the pressure on Japan to knuckle under.

#### **Coercive Military Measures**

China could undertake a variety of coercive military measures short of overt conflict to reinforce over time regional perceptions of growing Chinese military power and simultaneous relative decline of Japanese (and U.S. Pacific) military power. The stark contrast between growth and decline itself would be important.

Beyond steady increases in the PLA component orders of battle, China would engage in ever more frequent and complex military operations to demonstrate key capabilities and mastery of joint operations. The Chinese military (and/or intelligence services) activities might include (but not be limited to):

• Heightened aerial and maritime surveillance of Japan;

<sup>&</sup>lt;sup>29</sup> Given the great importance of undersea telecommunication systems, particularly for electronic financial flows, this might well be a two-edged sword, in that such UII is highly vulnerable on both sides, while the economic damage that conceivably could be inflicted in a methodical UII destruction campaign would be quite likely to have destructive effects on both or all sides. This may become an area where mutual deterrence or a sort of "MAD" (mutual assured destruction) regime might hold.

<sup>&</sup>lt;sup>30</sup> This would be a highly risky coercive measure to employ since non-attribution could not be assured. However, used selectively, particularly when other preparations for actual Sino-Japanese conflict are already completed, the economic (and psychological) costs that might result due to a panicked public, Japanese government over-reaction, and investor fear could be considerable.

- Heightened covert and overt surveillance of Japanese (and U.S.) military operations;
- Increased open challenges to Japanese air and naval forces in international waters, particularly
  those on or over which China made some claim under one or another international law rubric
  ("lawfare");
- Chinese military exercises ever closer to Japan and its territorial waters;
- Recurring highly visible PLAN warship transits through international straits separating Japanese main islands;<sup>31</sup>
- Clandestine/covert/proxy operations in or near Japan and its territorial waters to probe defenses; and
- Temporary but public intrusions onto disputed islands in the Senkakus.

Activities like these would be reminiscent of the kinds that the U.S. and Soviet militaries routinely conducted against the other during the Cold War. China could deliberately instigate incidents like minor collisions at sea and modulate a "war of nerves" with Japan as it saw fit. Failure by Japan to respond vigorously would result in steady increases in the diet of intimidation. From China's perspective, recurrent Japanese appearament would be a highly desirable result in that it would reinforce perceptions of growing Chinese dominance.

Complementing these activities, China regularly would continue to demonstrate potent anti-access/area denial (A2/AD) capabilities, among them: <sup>32</sup>

- Ability to conduct large-scale complex coordinated military operations (e.g., strike);
- Ability of its submarines and missile platforms to penetrate defenses to within weapons release range of high value Japanese (and U.S.) naval formations;
- Ability to hit specified mobile maritime targets in cluttered environments (i.e,. mastered the targeting problem) with anti-ship ballistic missiles (ASBM);

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<sup>&</sup>lt;sup>31</sup> In 1977, Japan reduced its claimed territorial waters from the standard 12 miles to only 3 miles within the five major straits passing between its islands in order to maintain high seas corridors for use by international shipping, in preference to having shipping pass through them under the transit passage rubric of international conventions. This enables it to retain the usual rights applicable to territorial waters under international law in the non-high seas portions of each strait. See <a href="http://www.state.gov/documents/organization/57684.pdf">http://www.state.gov/documents/organization/57684.pdf</a>.

<sup>&</sup>lt;sup>32</sup> For the purposes of this paper, "anti-access" operations include diplomatic, economic, and military actions designed to deny US forces forward access to bases in the East Asian littoral. "Area denial" operations are strictly military operations designed to contest US freedom of action in all military operating domains (undersea, sea, air, land, space, and cyberspace).

- Stealthy strike capabilities (e.g., cruise missiles, stealthy bombers) to stress Japanese air defenses and impose defense resource allocation costs; and
- Ability to destroy or disable Japanese (and U.S.) space assets.

Of note, many of the anti-access/area denial capabilities 2008 China is acquiring (apparently) to deny U.S. military forces access to its littoral waters would also be inherently employable in offensive operations against Japan due to the latter's geographic proximity.

# **DIRECT WARFARE**

A prolonged, multi-pronged, indirect coercion campaign by China to "Finlandize" Japan could conceivably be successful (especially if Japan were to lose confidence in U.S. reliability and/or capability as an ally over the long-term) – or it could stimulate a firm determination to resist by Japan, which eventually could result in direct Sino-Japanese warfare.

Such a war could be sparked in a number of ways. It could result through either deliberate or accidental escalation of one or more incidents, particularly if these came after a long period of increasing provocations, during which the perceived stakes for both countries were rising steadily. Another case could be where China generates a significant lead in military capabilities over Japan, but the latter, after a lag period, decides to respond firmly by generating its own potent military capabilities (whether for internal reasons, out of a perception of U.S. weakness or lack of reliability, or both), effectively generating an arms race and open strategic competition. During this period of relatively greater power, China might judge that its "comprehensive national power (CNP)" relative to Japan's would soon be at its peak, potentially making it feasible to militarily defeat Japan during a short and perishable window of opportunity.<sup>33</sup>

Regardless of how a war might start, from the Chinese perspective, there are various approaches that it potentially could select from to defeat Japan militarily that the Japanese military necessarily would have to deal with, whether symmetrically or asymmetrically.<sup>34</sup> These include any or all of the following:

- Nuclear coercion (up to and including actual strikes);
- Destruction of various Japanese target sets by long-range bombardment;

<sup>&</sup>lt;sup>33</sup> As an historical analogy (warning!), one might consider the case of Nazi Germany in 1938-39. Germany gained its immediate objective (the Sudetenland) at Munich in September 1938, but it stimulated major rearmament in Great Britain and France, on such a scale that the relative Nazi military advantage would start to diminish rapidly, a major factor in Hitler's push for war the following year. Near the end of his life, in fact, Hitler stated he considered himself to have been outsmarted at Munich when Chamberlain took away his pretext for early war.

<sup>&</sup>lt;sup>34</sup> "Asymmetrically" in this context is not intended to refer to "irregular warfare," per popular contemporary usage, but rather to military responses that differ in kind from what the other side is doing.

- Destruction of major Japanese military forces (functional disarmament);
- Destruction of Japanese shipping (economic warfare); and
- Seizure and subsequent annexation of Japanese islands.

#### **Nuclear Coercion**

China could threaten nuclear escalation against a non-nuclear Japan. Actual use of nuclear weapons could involve either strikes against particular targets or, alternatively, employment of high-altitude bursts to generate electro-magnetic pulses (EMP) to devastate the highly electronics-dependent Japanese economy. 35

Without question, threatened Chinese nuclear use against Japan would bring the reliability of U.S. extended nuclear deterrence into stark relief. If the United States reacted to Chinese threats of escalation forcefully, the usual nuclear calculus most likely would dominate the issue of Sino-Japanese war or peace. In the unlikely event that the United States did not forcefully react to Chinese threats, though, the implications for both its standing in the world and its value as an ally would be grave.

The drawbacks of actual nuclear use, e.g., universal condemnation, global bandwagoning against a lethal China, severe economic consequences, etc, would appear to make the prize of permanent dominance over Japan neither worth the price nor attainable, practically speaking. Moreover, any suggestion that China was considering doctrinal changes regarding possible offensive or first use of nuclear forces well might have the unintended effect of driving Japan to acquire nuclear weapons.

#### **Long-range Bombardment**

In 15-20 years, China could build up an inventory of intermediate range ballistic missiles large enough to subject the Japanese mainland to sustained massed guided weapon fires. Its ballistic missile production infrastructure is already mature and robust in 2008. Thus it would not be difficult for it to build up a sizeable force in a manner analogous to what present-day China has done vis-a-vis Taiwan. Chinese missile accuracy is already easily great enough to enable very precise strikes against both industrial and military targets; future missiles are certain to be even more accurate.

China could employ two broad styles of missile attack. It could attack major Japanese cities with massed strikes in order to induce widespread civilian panic, destroy major industrial infrastructure, and cripple the Japanese economy. The objections to such a campaign, however,

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<sup>&</sup>lt;sup>35</sup> For a recent assessment of the effects of such EMP strikes on the United States, see the April 2008 "Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack: Critical National Infrastructures." Japan would be at least as vulnerable.

are two-fold. First, absent a credible *casus belli*, such an assault would result in widespread opprobrium towards China and strongly negative economic consequences for its investment and trade. Second, this kind of terror bombardment or *schrecklichkeit* campaign historically has been quite ineffective.

However, Japan appears singularly vulnerable to a nodal precision strike campaign using ballistic missiles. As described earlier, the critical flow of imports, especially energy, comes through a small number of high-capacity ports, whose key cargo handling facilities would be quite vulnerable. Moreover, the ground transportation system has relatively little redundancy, with numerous potential chokepoints. Even if the ports could be successfully defended, disrupting the rail and road systems would significantly impede transshipment of imports within the country. Striking even a relatively small number of targets would effectively slow or even temporarily stop movement of people and materiel as well as impede repair and remediation efforts. Thus it would appear that causing economic paralysis through precision missile bombardment might be an attractive option for the PLA, absent meaningful Japanese counters. These counters will be examined in the next chapter.

The same vulnerability potentially pertains to Japanese military targets. Today's Japanese military operates from just a relative handful of major military bases. A much larger version would no doubt have more, and more dispersed and hardened basing than today. However, the same objections that pertain to envisioned future U.S. forces – more and more capable platforms but fewer and fewer of them, and their reliance on a handful of forward bases – would appear to pertain to future Japanese forces and bases as well.

The short time-of flight between China and Japanese targets also potentially would make feasible and perhaps attractive, ironically, a large-scale Chinese preemptive surprise attack against military targets at an opening of a Sino-Japanese war that could represent a disarming attack, absent effective Japanese counters.

More generally, the cost differential between offensive ballistic missile infrastructure and inventory on the one hand, versus the cost of ballistic missile defense (BMD) and the repair of potentially extensive ballistic missile damage on the other, may make a large ballistic missile inventory a potentially highly attractive offensive option for China.

#### **Destruction of Maritime Commerce (Economic Warfare)**

With its steadily growing maritime order of battle, including submarines and other undersea systems as well as land- and sea-based A2/AD capabilities, China could be in a position to conduct the same kind of economic warfare that the United States in effect waged against Japan during 1942-45. Through a relentless campaign of unrestricted submarine warfare, sea mining,

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<sup>&</sup>lt;sup>36</sup> The same argument applies, of course, to contemporary Taiwan, which today is arguably even more vulnerable to such a bombardment campaign. The difference is that China would be attacking those it considers its own people and destroying that which it hopes to gain.

and air bombardment of major ports, the United States effectively cut Japan off from virtually all imports and brought its economy to a halt.

A hostile future China conceivably could carry out an analogous campaign against Japanese shipping in large areas of the western Pacific. It could almost surely deny access to Japanese shipping throughout the South China Sea and likely well out into the Philippine Sea as well. Missile bombardment of key harbors could be supplemented by dense offensive mining of those harbors and their approaches, and by attacks against Japanese UEI and UII.

#### **Seizure of Japanese Islands**

Seizure of national territory would be a direct challenge to Japan. One or more of the Senkaku islands or uninhabited islands at the southwestern end of the Ryukyu island chain would be the most likely possibilities. Japanese leaders would face the difficult choice of accepting the affront to "national honor"; undertaking difficult military operations to retake and hold the distant island(s) in the face of Chinese A2/AD capabilities and island defenses; or using the seizure as rationale for either horizontal escalation or a more general conflict with China.

#### A CHALLENGING ALTERNATIVE FUTURE

This chapter has provided an overview of some of the difficult problems an aggressive, hostile China, bent on regional dominance, could pose for Japan. Doing nothing, and thereby accepting de facto Chinese suzerainty, is one Japanese option. "Letting the United States handle it" is another. However, this latter option could be increasingly problematic politically for Japan, since it would continue to subsume Sino-Japanese frictions under the imperatives of the overarching U.S.-China relationship, wherein Japanese interests may well be quite secondary to U.S. interests.

The other option would be that Japan defend itself directly and forcefully against a hostile China, either in conjunction with U.S. military forces or by itself with U.S. non-combat support. The next chapter will explore what Japanese strategists and military planners would need to consider in order to execute that option.

# IV. IMPORTANT STRATEGIC PLANNING FACTORS

The first thing Japanese strategists and military planners will need to consider is how to think about the problem of deterring China, and failing deterrence, defeating the Chinese strategy to achieve regional dominance. Almost by definition, this means determining each side's key strengths and vulnerabilities, and how Japanese strengths can be pitted against Chinese vulnerabilities, while simultaneously avoiding the reverse. Or put another way, how can the Japanese military defend against key Chinese means of attack, and how can Japanese offensive capabilities be employed to exploit Chinese strategic weaknesses?

#### Key questions:

- What are the major strategic asymmetries?
- How does Japan negate Chinese strengths?
- How does Japan exploit Chinese vulnerabilities?
- What missions and tasks must Japanese military forces be able to do?

#### MAJOR STRATEGIC ASYMMETRIES

The following important asymmetries appear inherent or else difficult to change materially.

# **Geographic Access to the Pacific**

The Japanese military potentially can block easy People's Liberation Army Navy (PLAN) and People's Liberation Army Air Force (PLAAF) access to the wider Pacific Ocean while the Chinese cannot do the same to the Japanese. Japan's main islands and the Ryukyu island chain form a geographic barrier across a wide arc that lies between China and the Pacific. Like the Cold War's GUIK gap analog, this island barrier naturally channelizes maritime traffic, enabling concentration of defensive measures on a reduced set of possible routes and sea areas. Particularly with regard to PLAN submarines, multiple undersea sensor networks, using diverse phenomenology for detection and cueing, along the Ryukyu island chain and across key straits, coupled with rapid response kill mechanisms, potentially could create an effective barrier to their passage into the Pacific. Were a highly effective barrier – or, almost equivalently, one believed by the PLAN to be so – to be established by the Japanese, PLAN units could be forced to enter the Pacific via the South China Sea, thence the Luzon Strait, or else via routes even further south. The islands of the Philippines, Sarawak, and Indonesia represent additional geographic barriers that translate into major operational time and endurance penalties even if safe PLAN transit through them could be assured.

The assumed incorporation of Taiwan could ease the PLAN and PLAAF problems somewhat. Chinese installation of dense undersea, surface and air surveillance and associated kill systems

on the island and offshore would increase the difficulty of Japanese (and U.S.) forces penetrating Chinese defenses. Conversely, it make it significantly easier for Chinese forces, particularly undersea forces, to get into the western Pacific by transiting close along the Taiwanese coast before exiting into the Philippine Sea somewhere along the approximately 300 nm long arc between the southernmost Ryukyu island and northernmost Philippine island. Moreover, possession of Taiwan puts significantly more PLAAF strike assets within easy reach of Japanese bases on islands in the Ryukyus, including those that would be supporting and operating the sensors and kill systems that would constitute much of the undersea barrier noted above (e.g., maritime patrol aircraft).

Parenthetically, these considerations underline the importance of preventing China and the Philippines from establishing close security relations. A Philippines allied with, or supportive of, China could make friendly penetration of the Luzon channel in the event of conflict significantly more hazardous with the emplacement of various undersea sensor-weapons networks, while simultaneously facilitating the exit into the Pacific of PLAN submarines.

## Access to U.S. Military Technology and Intelligence Support

Japan will have had substantial access to U.S. military technology over the previous 15-20 years. Indeed, in a world in which China is more openly hostile to both Japan and the United States, it is easy to imagine that any residual U.S. concerns about technology transfer, such as the recent denial of F-22 technology to Japan, would be dampened, and that Japan might gain access even to some of the most sensitive US capabilities. Despite startling improvements in Chinese use of technology, both domestic and imported, it is thus likely that most U.S. and Japanese military systems will maintain significant margins of technical superiority over Chinese counterparts over this period. In particular, the Chinese appear to have continuing problems with systems integration, an enduring U.S. advantage.

Given the postulated close U.S.-Japanese security relationship and increased force-wide interoperability, Japanese military forces could also count on having access to U.S. C4ISR capabilities and intelligence, which would provide them substantial operational advantages. This would remain true as long as China was not able to negate those assets' effectiveness through, e.g., attacks on U.S. space systems. However, were the latter to occur on a significant scale, a bilateral Sino-Japanese conflict likely would draw in the United States directly.

#### **Large Continental Power versus Offshore Power**

China is a large continental power with very long land borders to defend against multiple neighboring states. As of 2008, while China has made systematic efforts to resolve various longstanding border disputes with many of its neighbors, history suggests that few such disputes will remain permanently settled. For example, Chinese-Indian relations remain generally cool, with little reason to expect significant change for the foreseeable future. Fomenting trouble along China's border would be a potential cost-imposing strategy for both Japan and the United States.

These circumstances thus compel China devote significant spending on its ground forces in order to both secure its borders and to maintain a capacity to suppress internal dissent should it be ordered to do so. Similarly, given the size of the country and its long borders, China's air defense requirements, including infrastructure, will always be relatively greater than those of Japan.

In contrast, Japan requires few ground forces for direct defense of its territory. Air approaches to mainland Japan from China are narrower (assuming no Korean or Russian cooperation with Chinese military air operations), facilitating focused air defense. Thus Japan can afford to invest proportionately more in air and maritime power projection forces.

#### **Strategic Depth**

Because of its great physical size, as well as the size of its population and economy, China has considerable strategic depth, defined here as the ability to absorb considerable damage and maintain sufficient resources of all kinds to continue fighting. Its military basing and other key facilities are numerous and dispersed, and can be expected to be even more so 15-20 years into the future. It is therefore less vulnerable to even large-scale preemptive strikes. That said, as the Chinese economy and its supporting infrastructure, including transportation, energy and communications networks, grow and become more concentrated, China's vulnerability to nodal attack will grow commensurately.

Japan, in contrast, has relatively little strategic depth. As noted above, it would also be quite vulnerable to nodal attack. The number of key targets relative to the potential size of China's ballistic missile inventory is quite low, thus likely would be an important factor in Chinese risk-benefit calculations regarding a large-scale pre-emptive attack, absent Japanese counters.

More speculatively, however, Japan may have greater "strategic resiliency" than China, defined here as the ability of a society to respond under severe stress. The Japanese population is ethnically highly homogenous, disciplined, and cohesive. There is no issue of governmental legitimacy. These factors may be quite material to Japanese ability to respond more quickly and effectively to serious stress and attack than might China.

#### **Vulnerable Offshore Islands**

As noted earlier, Japan has numerous small, mostly uninhabited islands located quite close to China (Taiwan), and correspondingly far from Japan's main islands and thus most of its key military bases. These are thus potentially highly vulnerable to Chinese seizure.

China has no such corresponding possessions. Thus Chinese seizure of Japanese island(s) as a means of escalation could not be countered symmetrically by Japanese seizures of Chinese islands. Moreover, recapture by sea or air assault would be militarily difficult against defended targets, particularly given the potent A2/AD capabilities China could employ. Since such capabilities are designed to be effective against forces much further out into the Pacific, they would be all the more lethal in areas proximate to China. Consequently, China would have an asymmetric ability to force an "acquiesce or escalate" choice on Japan.

## **Energy SLOCs**

Both Japan and China are highly dependent on sea lines of communications (SLOCs) for trade, especially energy. However, China's SLOCs would be considerably more vulnerable to interdiction than Japan's.

Chinese SLOCs necessarily run either through the South China Sea or the western Philippine Sea, since geography offers no alternatives. On the other hand, if Japanese SLOCs through the South China Sea were blocked or interdicted, alternate routes are available.<sup>37</sup> Maritime commerce could be rerouted through Indonesian and southern Philippines straits, or even around Australia if necessary. While adding significantly to shipping costs, these are feasible alternatives.

As an additional asymmetry, Japanese submarines with anti-shipping missions would have several advantages over PLAN submarines with the same mission against Japan's SLOCs. Japanese submarines would have shorter transits to the approaches of major Chinese ports on the East China Sea than PLAN submarines would to most major Japanese ports and alternative sea lanes. Japanese submarines likely would face fewer undersea defenses entering the East and South China Sea than would Chinese submarines having to break out through the suitably sensored and defended Ryukyus island chain.

#### **Undersea Warfare (USW)**

Undersea warfare comprises both anti-submarine warfare (ASW) and offensive and defensive mine warfare (MIW). The Japanese Navy would have a significant advantage in these areas over the PLAN.

Japanese anti-submarine warfare (ASW) capabilities are far superior to those of the PLAN. The Japanese Navy is highly competent in air- and submarine-based ASW.<sup>38</sup> The PLAN is much less capable in terms of both ASW equipment and experience. ASW competence is particularly difficult for a navy to acquire, since it is based heavily on frequent realistic training and cumulative experience (both individual operators and as a force), with modern equipment being merely the ante to get into the game. With submarines and other undersea vehicles becoming ever more difficult to detect, even top navies like the U.S. Navy are finding ASW increasingly

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<sup>&</sup>lt;sup>37</sup> As a side note, were Arctic sailing routes to become open as a consequence of climate change, Japan would benefit asymmetrically in a conflict scenario in that it would gain alternate routing for European trade while Chinese shipping using that route would be highly vulnerable to interdiction from Japan.

<sup>&</sup>lt;sup>38</sup> The Japanese Navy is also quite competent at surface ASW in terms of its TTPs, which are essentially the same as those of the U.S. Navy. However, submarines, particularly quiet diesel submarines, especially those operating in noisy littoral waters, have inherent superiority over surface warships, making contemporary ASW essentially an air/subsurface enterprise.

difficult. Given the very low base level of 2008 PLAN ASW capabilities, it is difficult to envision the PLAN acquiring serious traditional ASW capabilities within the next 15-20 years.<sup>39</sup>

The Japanese Navy also has significant bottom topography and hydrographic advantages over the PLAN. Even were PLAN ASW competence on a par with the Japanese Navy's, PLAN littoral ASW operations in the shallow, noisy waters of the Chinese littoral would be considerably more difficult than deep open ocean ASW operations to the east of the Ryukyus.

This advantage extends to offensive mine warfare as well. Mines are far more employable (and layable from a range of military and non-military platforms) in the shallower, generally calmer waters of the East and South China Seas than in the deep water ocean basins east and south of the Ryukyus and Japan proper. Moreover, the fast-moving Kuroshio Current is the world's second strongest after the Gulf Stream. It runs in a northeasterly direction just east of Taiwan, flowing northwest of the Ryukyus, where it then splits off the Tsushima Current which runs through that Strait, and continues close along the Japanese southern coast. Such currents make it difficult to place mines accurately, and more importantly, almost impossible to maintain in position unless strongly tethered.

#### **Command and Control Styles**

It is a truism that command styles reflect societal culture. Speaking broadly, Chinese command style is heavily hierarchically controlled, reflecting a strong preference for positive direction rather than the "command by negation" and *Auftragstaktik* ("mission orders") philosophies preferred by the best western militaries. A telling example is the continued Chinese use of ground control intercept (GCI) tactics for air defense.

The price for positive control tends to be the stifling of initiative at lower command levels, as well as the slowing of decision cycles, sometimes profoundly. In theory, this would put premiums on forcing PLA choices under time stress at all levels whenever possible.

Japanese culture, historically heavily influenced by that of China, *prima facie* also would appear to have similar potential inhibitors. The Japanese military historically has executed detailed plans well, often brilliantly, but consistently has demonstrated notably poor operational flexibility. More troubling its World War II experience suggests that Japanese leaders have a remarkably

<sup>&</sup>lt;sup>39</sup> Note that considerable attention is being given to non-traditional means of gaining undersea situational awareness, much of it based on technological progress in both the scientific and commercial sectors. How this might affect future undersea combat is an area that deserves considerable study, especially since there is no reason to think that China could not be successful in exploiting new, non-traditional kinds of technologies and approaches with relevance to undersea defense (and offense) that in a sense would be "new" for every military.

<sup>&</sup>lt;sup>40</sup> The Kuroshio Current, second strongest after the Gulf Stream, runs at a speed of 7 kilometers/hour and can extend as much as 100 kilometers wide, depending on location. See <a href="http://www.jamstec.go.jp/jamstec-e/earth/p2/p2-1.html">http://www.jamstec.go.jp/jamstec-e/earth/p2/p2-1.html</a> and <a href="http://www.eorc.jaxa.jp/en/imgdata/topics/2004/tp040611">http://www.eorc.jaxa.jp/en/imgdata/topics/2004/tp040611</a> html.

poor ability to learn from error, modify their operations and tactics, or challenge the ideas of their seniors.

However, because of its reasonably close working relationships with the U.S. military over the past six decades, the Japanese military potentially may have an advantage over China's in terms of command and control. Most Japanese combat systems are or are derived from U.S. systems, which in highly technical areas like air and missile defense, tend to drive the tactics, techniques and procedures (TTP) for their employment. Combined training and exercising with U.S. forces have familiarized the Japanese military services with U.S. methods and practices, even if these are not always culturally comfortable—particularly those that emphasize a high degrees of individual initiative, including questioning for cause of orders from higher authority.

That said, the Japanese military is still uncomfortable with many ways of operating that are now deeply engrained in the U.S. military, e.g., conducting joint operations. One of this paper's possibly more heroic assumptions is that over the next 15-20 years the Japanese military and the U.S. forces working with them become highly interoperable in both the materiel and operational senses. There are some indications of societal changes afoot in contemporary Japan that suggest growing acceptance of (the need for) individual initiative and questioning of the hierarchical society among younger Japanese. Speculation on such questions is beyond the scope of this paper, but to the extent this is actually happening in Japanese society, it would facilitate the employment of TTPs and operational concepts that 1) greatly improve U.S.-Japanese interoperability in the field and fleet, and 2) could be manifested in significant tactical and operational superiority of Japanese over Chinese forces.

An analogous evolution in Chinese society, carrying over into the PLA, would appear much less likely given the continuing heavy-handed political control of the Chinese Communist Party.

# **NEGATING CHINESE STRENGTHS**

As a starting proposition, an ability to counter Chinese military coercion, either by itself or in conjunction with or supported by the United States, fundamentally underwrites Japan's ability to counter other forms of Chinese coercion. It must do this either by deterring Chinese use of military force, or if it comes to conflict, bringing the fighting to a conclusion advantageous to Japan. In order to do so, Japan and the United States must between them be able to maintain both nuclear and conventional escalation dominance over China.

# **Deterring Nuclear Weapons Use**

From the broadest perspective, in a purely Sino-Japanese confrontation (i.e., absent the U.S.-Japanese alliance) the Chinese nuclear missile force would provide China with unchallenged escalation dominance. Thus, Japan is forced to count on the United States for extended nuclear deterrence vis-à-vis China. Absent a high degree of Japanese confidence in US extended deterrence, the incentives for Japan to acquire its own nuclear weapons and delivery systems to

establish its own independent nuclear deterrent would grow steadily more powerful as the China threat grew. <sup>41</sup> Under conditions of uncertainty about U.S. reliability or capability, and/or a mounting deliberate Chinese threat, Japan conceivably could acquire nuclear weapons in a similar manner as Israel did in the 1960s, i.e., surreptitiously and while maintaining deniability. <sup>42</sup>

Note that there might also be scenarios, particularly those involving a significant shift in relative power between a waxing China and a burdened United States, in which the United States might consider it to be in its own national interest to support quietly or even to encourage openly Japanese acquisition of nuclear weapons. To the extent the Nuclear Non-Proliferation Treaty regime breaks down in succeeding years, the incentives for this would only increase.

The remainder of this paper will assume that mutual nuclear deterrence holds.

### **Defending against Ballistic Missile Attack**

As of 2008, Japan has already acquired or authorized six guided missile destroyers (DDG) equipped with the American Aegis combat system and vertical launch missile batteries capable of employing the new Standard SM-3 ballistic missile defense interceptor. Two more ships with these ballistic missile defense capabilities are planned. In addition, U.S. forward-deployed forces are defending the Kadena airbase complex with Patriot PAC-3 anti-air and anti-ballistic missile batteries, and Japan has begun to purchase PAC-3 batteries of its own. The United States and Japan are moving rapidly to improve BMD interoperability and BMD-associated intelligence sharing. Under the shadow of growing threats from China, particularly expansion of its inventory of ballistic missiles with the range to strike Japan, it seems likely that these cooperative efforts will only increase, and that Japan will continue to expand its BMD capability and capacity considerably in a major effort to protect the targets it deemed most important and/or sensitive.

However, the offensive-defensive missile competition remains offense-dominant under current technological constraints, and, on balance, is likely to remain so for the foreseeable future. The attacker can choose where and what targets to attack, while the defender must defend all targets it deems valuable. Moreover, guided missile salvos present an extremely challenging defensive problem. Current defensive systems like AEGIS/SM3 and PAC-3 are primarily point- rather than area-defense systems, with quite low probabilities of kill (Pk) against crossing targets. The short time-of-flight (TOF) for ballistic missiles fired from China against Japan, which decreases

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<sup>&</sup>lt;sup>41</sup> Again, the mooted U.S. conventional response to hypothetical DPRK use of nuclear weapons against Japan appeared to strike a serious Japanese nerve.

<sup>&</sup>lt;sup>42</sup> It seems less likely that Japan would either openly acquire or acknowledge possession of nuclear weapons – unless the Nuclear Non-Proliferation Treaty regime were irretrievably broken.

<sup>&</sup>lt;sup>43</sup> Should there be an epochal technological break-through in anti-missile defense (including much higher Pk, but also many more defensive "rounds" available) – effective directed energy weapons being the archetypal example – that would change today's missile regime fundamentally, with profound effects in multiple warfare areas. This paper will assume that does not occur for the next 15-20 years.

defending unit reaction times, further increases the burden on BMD defense. Furthermore, firing doctrines generally call for multiple defensive shots against any incoming missile, thus any given target is generally vulnerable to saturation attacks.<sup>44</sup>

On a macro-level, then, missile warfare will likely continue to strongly favor the offense. Thus, while BMD systems have value for deterring or countering very small-scale attacks, BMD alone most likely will not constitute an effective Japanese counter to a large Chinese ballistic missile inventory.

The strong implication is that Japan would need to acquire a significant offensive ballistic missile inventory of its own. If deterrence of Chinese ballistic missile attack failed, the Japanese would have to be capable of executing substantial ballistic missile attacks of their own. Given the high degree of concentration of Chinese population and industry in the coastal provinces, a consequence of decades-old deliberate Chinese development strategy, such missiles would not need to be able to range all of China, As noted previously, the increasing geographic concentration of the Chinese economy and supporting infrastructure increases Chinese vulnerability to the kind of nodal attack leading to large-scale economic dislocation a large offensive ballistic force could make possible.

The prerequisite conditions for acquisition of such an offensive force already exist. Japan's mountainous terrain and sophisticated tunneling capability would provide ample hardened sites to protect its offensive ballistic missile force from potential Chinese preemptive attack. It also already has a significant space industry with demonstrated capability, having first successfully placed satellites into orbit via the domestically produced H-2A rocket in 2002. That capability would translate readily into production of ballistic missiles. Japan's superb electronics industry easily could produce the necessary ancillary warhead and control systems. Over a 15-20 year period, Japan therefore should be able to acquire a sizable offensive missile force, if it chose to do so.

### **Defending against Air and Cruise Missile Attack**

Geography fortuitously provides only a relatively narrow approach sector to the Japanese mainland islands from airbases in China, on the assumption that PLAAF units were precluded from flying through Russian or Korean airspace.<sup>45</sup> Thus this affords the ability to concentrate air defense assets significantly, as well as presenting more nearly head-on rather than crossing air target profiles to defensive systems, with resulting higher Pk's.<sup>46</sup> Japanese air defenses could

<sup>&</sup>lt;sup>44</sup> This is a particular problem for sea-based BMD, where only a limited number of vertical-launch system (VLS) holes have to be allocated for multiple missile types depending on mission. VLS cells cannot be rearmed at sea, thus this is a particular problem for warships that must travel long distances to a port where they could rearm.

<sup>&</sup>lt;sup>45</sup> This underlines the importance of Japanese (and U.S.) diplomatic counters to Chinese efforts to forge much closer security ties with both Russia and Korea.

<sup>&</sup>lt;sup>46</sup> Note, however, that this does not apply to the Ryukyu islands, however. Why this could matter over the course of a longer campaign will be addressed later.

expect to inflict high attrition rates against attempted penetrations by Chinese longer-range bombers and strike-fighters, especially if they were non-stealthy.<sup>47</sup> Kyushu-based long-range SAM systems would threaten Chinese aerial refueling assets operating over the East China Sea, which would make employment of shorter-ranged tactical strike aircraft infeasible.

Radar sites along the Ryukyu island chain and airborne early warning (AEW) aircraft could provide substantial early warning of impending strikes. Moreover, because these AEW assts would be off-axis relative to aircraft flying from bases in northern and central eastern China to the Japanese main islands, when used with Cooperative Engagement Capability (CEC)-type systems, they could be very useful in detection of stealthy platforms.

Air attack against the Japanese home islands by penetrating manned bombers against sophisticated ground-based and interceptor defenses thus would not appear to be an effective Chinese offensive technique. At fight glance, air-launched land attack cruise missiles (LACM), released from well-outside defensive SAM range, would appear to offer greater possibilities for Chinese attack planners. But Japan's mountainous terrain renders more difficult (though not impossible) the employment of low-flying cruise missiles against many mainland targets. Moreover, cruise missile payloads are generally comparatively small and subsonic cruise missiles present relatively easy targets to sophisticated integrated air defenses. This is especially true if the approach routes to some targets can be channelized, and thus made more predictable to some degree, which facilitates the appropriate siting of defensive systems to maximize Pk.

LACMs launched from sea areas east of the East China Sea could provide a more difficult problem, since they could potentially come from many of the large numbers of non-military vessels sailing near Japan (since LACM-armed warships operating outside the Ryukyu island chain likely would have limited survival probabilities, about which more later). The difficulty from the Chinese perspective, however, is coordinating the attacks and getting sufficient numbers of cruise missiles launched to inflict meaningful damage. Similar objections would obtain for submarine-launched LACMs. Moreover, every PLAN submarine launch tube, cell, or storage spot with a LACM means one fewer available for torpedoes or anti-ship cruise missiles (ASCMs), which are vital to the ASW and anti-shipping missions.

Nonetheless, this discussion strongly suggests that the Japanese cruise missile defense problem would have a significant maritime element, in that during wartime (or major crisis) it would be imperative for the Japanese Navy and Coast Guard to ratchet up their maritime domain awareness, i.e., maintain a high degree of maritime surveillance to identify potential LACM carriers. This might require expansive exclusion zones, mandatory shipping routes, mandatory reporting requirements (analogous to air traffic control today), sufficient numbers of fast small craft able to conduct searches of suspicious vessels, and quick reaction strike assets to kill

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<sup>&</sup>lt;sup>47</sup> This assumes a significant increase in numbers of fighter bases in southwestern Japan, both for purposes of reduced flight times and for dispersal capacity.

vessels identified as hostile. Design and regular exercising of detailed contingency plans for rapid implementation of such controlled traffic schemes would be important. 48

### **Containing PLAN Submarines**

In 15-20 years, a belligerent China likely would have a larger and even more sophisticated submarine order of battle than is already the case in 2008. The likely employment of its diesel and nuclear attack and conventional cruise missile submarines will be primarily anti-surface warfare (ASUW). This is based on the assumptions that the force will not have acquired the expertise necessary to conduct a successful sustained ASW campaign against very quiet and sophisticated Japanese (and U.S.) submarines and that the primary mission for Chinese tactical submarines will be sea denial operations in the East China Sea and the western Philippine Seas.

Chinese ASUW operations will likely be divided between two primary roles. First, consistent with their sea denial mission, they will be tasked with destruction of high-value Japanese (and U.S.) surface warships and helping to make sea areas within enemy weapons release range be so hazardous (or perceived that way) that enemy commanders will be unwilling to risk operating their ships there. Second, submarines would be the most effective means to attack Japanese energy sea lines of communication (SLOC), particularly if merchant shipping were diverted as expected from the South China Sea to more easterly routes in the western Pacific. Besides crimping Japanese energy imports, a serious submarine threat would have the additional beneficial effect of forcing the Japanese Navy to dedicate substantial resources to protection of shipping over long distances.

Dealing with the PLAN submarine ASUW threat is critical to the overall defense of Japan. Failure to contain this threat—and in particular, failure to prevent major submarine breakouts through the Ryukyu island chain—would allow the PLAN to conduct large-scale, anti-commerce warfare in the Philippine Sea and along the approaches to major Japanese ports (including offensive mining in the shallower, lower current portions in the approaches to pin down Japanese resources and slow operational timelines); result in higher risk to, and attrition of, Japanese and U.S. naval forces operating in the Philippine Sea; force the diversion of substantial naval resources to ASW over a large area; and, potentially, open the door to attacks against Japanese undersea energy and information infrastructure.

A high PLAN submarine threat in the Philippine Sea would also make defense of the many Japanese surveillance and reaction sites associated with air defense and undersea sensor systems along the Ryukyu island chain against much more problematic. Japanese and U.S. planners would likely be reluctant to risk either high-value naval assets or substantial force-wide attrition in localized defensive operations against Chinese sea-mounted attacks and raids.

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<sup>&</sup>lt;sup>48</sup> The U.S. Navy's lack of preparedness and poor performance in doing this against a much smaller and less capable force of U-Boats brought East Coast tanker traffic to a complete halt in April 1942, four months after the outbreak of war with Nazi Germany, following months of appalling shipping losses.

To increase the odds of success in inhibiting large-scale PLAN submarine breakouts through the Ryukyus – "driving them south," so to speak – the Japanese could create barriers consisting of multiple redundant sensor arrays down the island chain extending from the islands just west and south of Kyushu down along the Ryukyus, Sakishima Gunto, and the Senkakus. Such barriers would need to be multi-phenomenological since acoustic arrays alone may be insufficient for high-probability detection of very quiet diesel submarines. Such arrays would have to be integrated with a range of submarine kill mechanisms, including deeply moored and mobile mines, remotely fired mines; patrolling unmanned combat undersea vehicles (UCUV) if technologically sufficiently advanced; maritime patrol aircraft (MPA); airborne ASW "pouncer units"; and submarines.

This integrated sensor-kill system could be conceived of as an "undersea combat network." The battle to keep this network operational in the face of concerted Chinese attacks would be one of the most important in any large-scale Sino-Japanese conflict. Protecting the network's undersea arrays and associated shore sites would have to be a high priority. Protective measures might include redundant arrays; camouflage, concealment and decoys (CCD) as well as covertness and deception during construction and emplacement; rapid repair and remediation capability; limited unattended ground sensors (UGS) and/or ground defenses to protect against raiding parties; and air defense against strike aircraft and cruise missiles.

In addition to maintaining the Kyushu-Ryukyus-Senkakus barrier, the Japanese Navy would also need to prevent Chinese undersea traffic from breaking out via the Luzon Strait. Possible cooperation with a Philippines similarly alarmed by China's belligerent posture might enable similar placement of sensor arrays in the Strait from Luzon through the northernmost of the small Philippine-owned islands. This would still leave an approximately 50 nm gap south of Taiwan that would have to be monitored and patrolled by conventional ASW assets, including mobile arrays. This underlines the remerging importance of the Philippines as a security partner for the United States (and now Japan, despite historical animosities) and, above all, forestalling close Sino-Philippine security cooperation.

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<sup>&</sup>lt;sup>49</sup> For an excellent summary of the many kinds of undersea sensors being worked on today's scientific and commercial sectors, see CAPT Paul Thomas, USCG, "Ocean Sensors and Ocean Sensing Systems - 'Quick Study' Supplement to the Undersea Net Assessment," an unpublished June 2006 report done for the Director of Net Assessment.

<sup>&</sup>lt;sup>50</sup> UCUVs are weaponized Autonomous Unmanned Vehicles (AUVs) or Unmanned Undersea Vehicles (UUVs). For more detailed discussions of these undersea vehicles, see *Maritime Futures: The Undersea Environment*, a report prepared for OSD Net Assessment, January 2003, and *Undersea Warfare 2025: Prospects for Change*, a report prepared for OSD Net Assessment, October 2005.

<sup>&</sup>lt;sup>51</sup> "Pouncer units" are ASW ordnance-equipped surface or, preferably due fast reaction time, air units that can rapidly localize and attack a submarine contact detected by offboard sensors.

<sup>&</sup>lt;sup>52</sup> In a sense, these could be considered the metaphorical equivalents of the British Chain Home radar sites during the Battle of Britain. Being able to detect attackers was crucial in enabling their destruction before they could break through and do damage (although inevitably some did and would).

While the Tsushima Strait must be similarly monitored and patrolled, it represents a less critical undersea defensive problem since there is only one major Japanese port, Niigata, on the Sea of Japan. This reduces the potential payoff for Chinese submarine penetrations into this maritime operating area. Moreover, undersea passage through the Strait would be quite hazardous for submarines, not least due to the exceptionally high density of fishing boats trailing nets there. Nonetheless, maritime surveillance would still be required due to the potential threat of offensive minelayers and LACM shooters.

The bottom line is that the Japanese Navy must seek to affect the PLAN submarine force risk calculus concerning transit routes into the Philippine Sea by demonstrating its capacity to maintain an effective undersea combat network. In general, it should seek to minimize the employment of its submarines in an ASW role in order to free them for other, offensive missions.

# **Denying the East China Sea**

The Japanese Navy must limit the ability of PLAN surface units, especially long-range ASCM shooters to operate in the East China Sea. If the Chinese military were successful, at least initially, in its A2/AD efforts against Japanese (and U.S.) surface naval forces there (and farther east), then the Japanese military must do the equivalent to PLAN surface warships.

Japanese submarines would be especially potent against Chinese surface warships, and almost invulnerable in the shallow, noisy East China Sea. But as noted previously, they are a relatively scarce resource relative to other missions, particularly destruction of Chinese tankers. Barring a substantial expansion of the Japanese submarine fleet, submarines would not be the preferred warship-killer in the East China Sea.

Remotely-fired ASCMs launched from small Ryukyu islands would likely be the most cost-effective means of denying PLAN surface warship access to large parts of the East China Sea. Such ASCMs could be emplaced in hardened sites (again, the volcanic nature of Japanese territory facilitates this). Targeting could be done with a mix of netted UAVs and maritime surveillance aircraft (though the reach, thus effectiveness, of the latter could be constrained by Chinese long-range land-based SAMs as well as missiles from not-yet-destroyed PLAN SAM-shooters). In this regard, PLAN naval formation defense could be complicated by the Japanese employment of numerous cheap UAV decoys to draw SAM fires to deplete PLAN missile magazines.

ASCMs launched by land-based Japanese Air Force aircraft could also be effective ship-killers. In effect, Japan is a large and unsinkable "aircraft carrier," and ACSM-armed Japanese Air Force aircraft could easily range the entire East China Sea. However, for this threat to be credible to Chinese planners, the Japanese Air Force would need to devote serious resources and training to

<sup>&</sup>lt;sup>53</sup> Such UAVs could also be armed, but they would be more expensive. While UAV-fired ordnance could be effective in at least mission-killing small vessels like *Houbei*-class fast attack craft, it would not be generally be powerful enough to seriously damage larger warships.

the maritime strike mission—a mission that most air forces, including the U.S. Air Force, have seen as secondary at best. However, this option makes far more sense and is far less expensive than developing separate naval strike aviation, let alone conventional carrier aviation.

Offensive mining against major PLAN surface naval bases with access to the East China Sea would also be an option. However, these operations would involve significant opportunity cost in terms of payloads and alternative missions for both submarines and aircraft, the principal long-range minelaying platforms. Given the surface ship killing alternatives outlined above, offensive mining would probably be better used at chokepoints and harbor approaches to kill merchant ships, and, given the centrality of the ASW campaign, against major PLAN submarine bases.

# **Defending Forward Sites**

As noted above, protecting forward sites in the Ryukyu island chain such as coastal ASCM launchers and undersea barrier stations would be crucial to winning the larger maritime fight against the PLAN. Keeping both an "ASCM force in being" vis-à-vis the PLAN in the East China Sea and maintaining their undersea combat network will be the keys to winning any new "battle of the Philippine Sea."

The very importance of these forward operating sites may also create an additional opportunity for Japan. Since Chinese planners would presumably understand their importance, destruction of these assets would likely be a high priority for them. Their use of highly accurate ballistic missiles might be effective, even against many hardened Japanese sites, but it would be ruinously expensive to use them against simple ASCM launchers and other targets that could also be decoys (hence the importance of effective CCD, deception, and covert construction).

The main Chinese alternative would likely be PLAAF strike aircraft. As noted earlier, the southern Ryukyu islands are within easy strike range of Taiwan-based aircraft, though Okinawa and islands further north involve considerably longer transits. If so, with proper planning, the Japanese Air Force might be able to inflict considerable attrition on PLAAF attackers. The obvious key is Japanese fighter superiority, which would be substantially enhanced by acquisition of 5<sup>th</sup> generation fighters with a qualitative edge over PLAAF fighters. One other prerequisite would be robust aerial refueling capacity over the Philippine Sea, given that forward fighter bases in, e.g., Okinawa, would likely be too vulnerable to ballistic missile attack. One other enhancer in this context would be stealthy fighters with long-range air-to-air missiles (including anti-radiation homers) to kill or drive back PLAAF AEW and strike direction aircraft, both to aid air defense and to facilitate Japanese offensive air operations.

# **Defending East China Sea Undersea Energy Infrastructure**

Much of the East China Sea undersea energy infrastructure such as platforms and attending vessels on both sides would be vulnerable to torpedo and cruise missile attack. Those assets, as well as undersea components such as wellheads, manifolds, and major pipelines would also be

vulnerable to other kinds of undersea vehicles such as UCUVs, assuming they can move into or be brought within effective range.<sup>54</sup>

Whether this mutual vulnerability would result in mutual destruction or mutual deterrence would appear situational dependent and would be unlikely to be known *a priori*.

# **Defending Harbors and Approaches**

The main maritime threat to shipping in Japanese harbors and their approaches are submarines and mines, which can be laid by aircraft, submarine, and all kinds of surface vessels. As already discussed, preventing large-scale break out of PLAN submarines – the battle of the undersea barriers, so to speak – would be the principle means of defending Japan's maritime commerce. But assuming that some number of submarines will escape into open waters, the approaches to major Japanese ports would also need sensor arrays to detect intruding submarines. Since standard ASW kill mechanisms like air-dropped or ship-launched torpedoes are unlikely to be effective in the shallow, noisy approach waters, defensive minefields comprised of mobile mines, remotely fired tethered torpedoes or patrolling UCUVs would need to be employed. Predesigned fields and stocks of components would need to be updated and maintained on hand for rapid deployment during the run-up to a major conflict.

The Japanese Navy would also need to maintain a significant mine countermeasures (MCM) force, as it does today, able to maintain and clear Q-routes for each major harbor.<sup>55</sup> The greater the MCM proficiency, capacity and readiness it could demonstrate (or convince the PLAN that it had), the greater the PLAN disincentive to run the risks and pay the opportunity costs associated with distant offensive minelaying.

### **Defending Long-Distance SLOCs**

With the volume of merchant shipping necessary to keep the Japanese economy going, including adequate energy and food supplies, and the long distances over which its SLOCs run, it would be impossible to protect all its shipping everywhere. Convoying of high-value shipping is a traditional response to a serious submarine threat, though there is a serious question about whether the concentration of shipping that convoys entail is wise if the attacking submarines were equipped with large numbers of lethal ASCMs rather than just torpedoes. There is also a significant economic cost associated with the inefficiencies of convoy scheduling and stacking

<sup>&</sup>lt;sup>54</sup> As recent OSDNA wargaming has suggested, in the future it may well be possible to pre-position undersea attack devices such as mobile mines, tethered torpedoes, and UCUVs during a pre-conflict period, leave them for a considerable time (some experts suggest as long as a year), then activate them remotely when required. Parenthetically, arguably the separate concepts of "mines," "torpedoes," and small armed undersea vehicles may be converging steadily into the unitary notion of mobile long-range/endurance unmanned undersea weapons, with individual operating characteristics determining how they are deployed and employed.

<sup>&</sup>lt;sup>55</sup> Q-routes are shipping channels that would be used by shipping entering and leaving a harbor in the event of a mine threat. Such routes are searched periodically by MCM units to investigate and map any changes in bottom objects found along the route.

up of arriving cargos at major harbors (incidentally creating lucrative targets for ballistic missile attack).

At longer distances from Japan, e.g., the Indian Ocean, and the Straits of Malacca and Singapore, the threats from submarines and occasional raiders (e.g., Q-ships) may be less than in the Philippine Sea, simply because of the long distances those PLAN assets would need to travel to get there (hence limiting their time on station). Nonetheless, the Japanese would want to protect against cheap kills, so would need persistent presence of naval escort units in southeast Asian waters. Such units might be comprised of an ASW helicopter carrying ship like the new 18,000-ton *Hyuga*-class and several low-end surface escorts, supplemented by long-range MPA, some possibly based in northern Australia. <sup>56</sup>

But the main defense of shipping in a major Sino-Japanese conflict – apart from winning the "battle of the undersea barriers" – would entail the rerouting of high-value shipping as far away as possible from waters where Chinese attackers can operate. The further away from their own waters that these attackers must operate, the less effective and the more vulnerable they would be.

# **EXPLOITING CHINESE VULNERABILITIES**

In considering the exploitation of Chinese vulnerabilities by Japanese military forces in a major Sino-Japanese conflict, the presumably high stakes involved would enable consideration of ruthless measures that would be considered unthinkable in the world of 2008. At the same time, these would, at least initially, likely be bounded by mutual deterrence of nuclear weapon use and of massed ballistic missile strikes against each other's homelands. Thus there would have to be a careful weighing of potential gain from the amount of damage the Japanese military inflicted on China and/or the Chinese military versus the risks of escalation to levels that could result in devastating losses to both nations—which would be a highly unsatisfactory outcome for each side.

So the question becomes: what Chinese vulnerabilities might the Japanese armed forces to exploit without substantially raising the risk that the Chinese would escalate to massed conventional or even nuclear strikes against the Japanese main islands.<sup>57</sup>

<sup>57</sup> This would be a matter of judgment that would be, of course, fraught with danger of miscalculation. Making this even more dangerous from a U.S. point of view would be that the Japanese risk calculus might be significantly different than the American one, particularly as the emotional elements of the Japanese leadership (and public) were engaged.

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<sup>&</sup>lt;sup>56</sup> These might be functional equivalents of the small CVE escort groups, supplemented by long-range land-based patrol planes, which protected Atlantic convoys during the last two years of the World War 2.

# **Interdicting Energy SLOCs**

China is significantly dependent on maritime energy imports, principally from the Middle East. Interdicting its seaborne energy flows as a means to force China to stand down in a crisis or terminate a conflict has become accepted wisdom among many naval strategists, though in practice it likely would be much tougher than commonly thought.<sup>58</sup> Traditional interdiction efforts could take any of several forms such as distant blockade; close blockade; and "blockade by convoy."<sup>59</sup>

Realistically speaking, the Japanese Navy could only consider close blockade, certainly for reasons of politics (and history), but more importantly, due to the sheer number of ships it would take to enforce the other two types of blockade. This is driven in no little part by the enormous distances involved the Indian Ocean, the southeast Asian approaches, and the western Pacific, but also by the number of ships and personnel needed for vessel search and seizure, prize crews, care and feeding of detained crews, post-search compliance enforcement, recurrent warship maintenance. Moreover, the Japanese Navy would not likely receive much help or cooperation from states located close to or adjoining China. Were Japan to invest in naval forces of the size realistically required to conduct distant blockade or blockade by convoy, it would almost surely result in an unbalanced military that assumes excessive risk in other areas.

Close blockade thus would appear to be the only feasible option for Japan. But given the postulated potent Chinese A2/AD capabilities that would make surface warships operations too risky in the East and South China Seas, interdiction of Chinese merchant traffic would likely have to fall to ASCM-equipped strike aircraft and submarines.

China's main oil ports and refining concentration areas are located in or near Shantou (Guangdong) along the southeast coast near Hong Kong; the Shanghai area, including Nantong (Jiangsu) and Ningbe (Zhejiang), along the central coast; and Qingdao and Dalian on the northern coast, with an average of 13 tankers going to China per day. <sup>60</sup>

Mounting air-launched ASCM attacks from Japanese bases against tankers in the South China Sea would be quite difficult, involving very long-range strikes (thus long transit times and aerial

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<sup>&</sup>lt;sup>58</sup> For an excellent summation of the factors entailed in imposing these types of blockades against China and possible Chinese counters to them, see Gabriel B. Collins and William S. Murray, "No Oil for the Lamps of China?," *Naval War College Review* (Spring 2008), pp.79-95.

<sup>&</sup>lt;sup>59</sup> Distant blockade entails blocking tankers bound for China at chokepoints like the Straits of Hormuz or Malacca. Conceptually simple, the practical difficulties are enormous, including ensuring that ships that are allowed to pass do not proceed to Chinese ports after all. A large number of naval ships would be required. Close blockade, as the term implies, is interdiction of tankers in close proximity to Chinese ports. "Blockade by convoy" would involve making tankers traveling to friendly East Asian states travel in escorted convoys in order to ensure none would go to Chinese ports in contravention of the blockade. This again would require large numbers of naval ships and the active cooperation of the other regional states. See Collins and Murray.

<sup>&</sup>lt;sup>60</sup> William S. Murray, "Could a Blockade Cut Off China's Oil?," China Maritime Studies Institute, Naval War College, July 24, 2008 briefing.

refueling) while running the gauntlet of PLAAF air defenses based in Taiwan, Hainan, and other southern Chinese bases. Attacks against tanker traffic going to more northerly ports would entail shorter transits to within attack range, but would still face formidable Chinese air defenses. Assuming Chinese tankers would hug the coast after passing through the Taiwan Strait, targeting from a distance would be a considerable challenge in terms of identifying specific contacts to strike. Then, the traffic density, including fishing boats and small craft, would require remarkably precise missile targeting in order to achieve a reasonable Pk against the intended target. Conceivably targeting could be assisted by long-range, persistent UAVs, but the key operational problem remains picking out the relative handful of tankers from the thousands of other contacts, including many merchant ships large enough and with sufficiently similar silhouettes to make them difficult to differentiate from the energy carriers. Then, even if the ASCMs successfully strike their targets, experience has demonstrated that ASCM hits have rarely inflicted very serious, let alone lethal, damage against large tankers. 61

Thus, submarine interdiction would appear the most effective way to interdict (some portion of) Chinese seaborne energy imports. By focusing their efforts near and on the approach routes to the major oil ports, Japanese submarines would have reduced search areas (since the tankers would have to close on them). Detection and targeting could be facilitated by stealthy UAVs as noted above. Conceivably, Japanese submarines could also carry their disposable cheap UAVs for purposes of target localization (an alternative form of "periscope"?).

The preferred means of attack would be with torpedoes and mines, since the underwater explosions they cause are much more deadly, especially against large ships, since they tend break their keels. In contrast, while ASCMs can inflict significant superstructure damage to large tankers, they usually leave a tanker's hull and propulsion systems mostly intact. However, an ASCM likely would be highly effective in the counter-escort role.

A limiting factor in the effectiveness of such a submarine interdiction campaign would be the relatively small payloads carried by Japanese submarines.<sup>62</sup> Add the relatively slow transit speeds of diesel submarines, which have to return to port to rearm, and the amount of on-scene ship-killing ordnance available at any time is liable to be rather limited. This argues for a significantly larger submarine order of battle, but also realization that the traditional interdiction of seaborne energy flows, while able to hurt China, is unlikely by itself to be a war terminator, let alone war-winner.<sup>63</sup>

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<sup>&</sup>lt;sup>61</sup> During the so-called "tanker war" in the Persian Gulf in 1984-87, very few tankers struck by ASCMs were even prevented from proceeding to port on their own.

<sup>&</sup>lt;sup>62</sup> Most Japanese submarines (all diesel) carry 20 torpedoes or surface-to-surface missiles (SSM). As a rule of thumb, submarines can generally carry two mines in the place of one torpedo.

<sup>&</sup>lt;sup>63</sup> The addition of nuclear submarines could increase the lethality of an interdiction campaign significantly, principally by greatly reducing transit times to and from interdiction points. Those interdiction points could also be expanded to include chokepoints much further afield, e.g., in the southern end of the South China Sea outside the Singapore Strait, where target identification could be facilitated by observers ashore and on small craft and fishing

However, Chinese seaborne energy flows could be effectively interdicted in an entirely different way. Rather than (or in addition to) attacking tankers, related targets like major harbor cargo handling facilities and critical oil and gas infrastructure could be destroyed.

A possible method of at least partially achieving the intent of an energy blockade would involve preventing China from processing and distributing oil, regardless of how it got into the country. China ... is vulnerable to precision attacks on key energy infrastructure, such as refineries and pumping stations. The destruction of critical infrastructure components could almost completely deny China the ability to processes crude oil or transport refined products efficiently. This could conceivably be achieved with minimal destruction while minimizing risk to attacking forces.<sup>64</sup>

In particular, attacks on oil refineries, most of which are located in coastal areas, thus easily within range of various kinds of Japanese offensive systems, could cost China the ability to produce fuels from oil for many months. Doubtless the Chinese could ameliorate the effect of such attacks to some extent by drawing from their strategic petroleum reserve (SPR) and prestaging repair and remediation materials, but these targets would remain vulnerable to re-attack. This kind of punishing attack would also likely have cascading strategic effects, because the resultant energy shortages would cause widespread economic dislocation, with further implications for domestic unrest. The attacks would also require the Chinese government to mount large-scale relief operations. On a different level, the destruction and burning of oil targets would be highly visible to hundreds of thousands if not millions of Chinese civilians, making it undeniable that China was not doing well in the war with Japan. Whether this might contribute to demoralization or motivational anger is, of course, speculative.

However attractive such attacks might be, because they would represent direct attacks on the Chinese homeland and would cause China major difficulties, they likely would be escalatory. It would thus probably be undesirable for Japan to initiate this kind of homeland attack for fear of prompting like attacks against the Japanese homeland. As previously noted, Japan has similar vulnerability to Chinese attacks, including against its nuclear power plants. But whereas the Japanese military would have a variety of means to attack coastal Chinese oil infrastructure targets, the Chinese would likely be limited to ballistic missiles. A ballistic missile attack would have to be on large enough to ensure it would penetrate Japanese BMD and kill its intended

boats. Note, though, that the Malacca Strait is too shallow for submarine operations, including submerged transit in some parts. Even if putative Japanese nuclear submarines were to transit south of Indonesia to take station in sufficiently deep water near the northern entrance of the Malacca Strait, their search areas would be quite large. Compared with the huge expense of creating and maintaining a nuclear submarine force and supporting infrastructure, the advantages for the Japanese Navy in carrying out this and other missions appear rather small.

<sup>&</sup>lt;sup>64</sup> Collins and Murray, p.90.

<sup>&</sup>lt;sup>65</sup> Regarding the latter, the prevailing winds are easterly, thus China would have only a limited risk of fallout contamination from damaged Japanese reactors, while the reverse would not be the case.

target set. This, in turn, could well result in major Japanese retaliatory missile strikes, leading to further escalation.

The bottom line is that because Japan is more vulnerable to large-scale nodal attack than China, it would not be wise for Japanese forces to be the first to initiate homeland strikes against Chinese targets that could inflict substantial damage. But *it must be prepared to retaliate on the same scale* if the Japanese homeland is attacked, and major Chinese oil refining infrastructure would make an attractive strategic target.

### **Isolating Taiwan**

Possession of Taiwan would give China significant military advantages, including air and maritime bases and surveillance sites that extend Chinese reach well into the Philippine Sea, easier access to the open ocean, and greater proximity to Japanese SLOCs and the Ryukyu Islands. At the same time, it may represent a new vulnerability. One of the real-world Chinese coercion options against Taiwan was an economic blockade. A Taiwan now part of China would remain similarly vulnerable.

Taiwan has only three significant ports, with most of its energy imports coming through one major port, Kaohsiung.<sup>66</sup> It would be relatively easy to interdict these ports by mining (and reseeding frequently) the harbor approaches and by conducting undersea attacks (e.g., through use of UCUVs) inside the harbor. Critical major oil transshipment points could be sabotaged or else possibly attacked directly. The other two ports could be similarly blockaded. This would put immediate economic pressure on the island population (some 23 million in 2008), and compel senior Chinese leadership to order the PLA to divert resources to countering the blockade and providing assistance to the population.<sup>67</sup>

One open question concerning direct attacks on Taiwan proper is whether the Chinese leadership would consider them equivalent to attacks on mainland China. Rhetorically that could be expected to be the case. However, the argument could be made that China would be reluctant to risk Japanese attacks on the actual mainland by retaliating against the Japanese homeland in response to Japanese strikes on Taiwan. If this were indeed the case, this could open up further offensive options for Japan, about which more later. <sup>68</sup>

<sup>67</sup> Most civilian relief supplies would have to come by air or else by small vessels coming across the 75 nm wide Taiwan Strait to minor ports or via the beach.

<sup>&</sup>lt;sup>66</sup> Like Japan, Taiwan is almost totally dependent on seaborne energy imports.

<sup>&</sup>lt;sup>68</sup> It should be noted, however, that Japan and Taiwan have longstanding cultural affinity, based in part on the relatively benevolent Japanese occupation from 1895-1945, that might inhibit Japanese willingness to strike

### **Bottling Up the PLAN**

Chinese naval bases are more easily approached by Japanese undersea forces than vice-versa. The centrality of winning the "battle of the undersea combat networks" was discussed earlier. The focus was on preventing PLAN submarines from being able to break out into the Phillipines Sea, which in turn would enable other Japanese (and U.S.) naval forces greater operational flexibility due to lower risk. If Japan were able to do so, a logical follow-on objective would be to progressively attrite and/or bottle up submarines and other major PLAN units.

As previously noted, in the shallow, noisy areas of the East and South China Seas, ASW would be difficult for both sides, though more so for the PLAN given its poor ASW capability. The odds of sub-on-sub encounters, except for accidental close encounters, would likely be quite small, assuming that both sides operated their submarines competently and minimized their "indiscretions." Thus submarines would operate relatively freely, with one exception: Chinese submarines would have to return periodically to their bases to resupply and rearm, thus necessarily transit through relatively limited areas, thus potentially raising their vulnerability. This could provide opportunities for lurking Japanese submarines, loitering UCUVs, and planted mines/tethered torpedoes to attrite, slow Chinese transits and sortie rates, or, ideally, convince PLAN commanders not to risk their assets.

Similar TTPs could be used over time to bottle up (or increase the perceived risks of sortieing) PLAN surface units as well. These would be lesser targets than PLAN submarines, however, since they would remain highly vulnerable to other forms of attack.

Depriving major PLAN units of their freedom of action even in waters relatively close to China would be a fairly convincing demonstration of Chinese weakness.

### **Stressing Chinese Air Defense**

Distributing U.S. Navy long-range strike capability in the form of LACMs on surface ships and submarines greatly increased the number of strike platforms that Soviet planners had to consider for purposes of air defense, compared with the small set of 15 or so aircraft carriers that had previously comprised the totality of U.S. Navy conventional land attack capability. Giving Japanese naval units similar capabilities would present Chinese air defense planners with analogous concerns.

<sup>&</sup>lt;sup>69</sup> Note that PLAN defensive measures such as defensive mining and undersea arrays would tend to be denser the closer they were to the entrances to its naval bases. Thus the closer to those bases the more risky for Japanese submarines; conversely, the further away they remain, the greater the area to search for transiting PLAN submarines, with resulting lower probabilities of detection.

<sup>&</sup>lt;sup>70</sup> Large-scale use of pressure mines might be particularly effective, since these are highly resistant to sweeping. Neutralization by minehunting, which entails locating the mines, then exploding charges near them, is a very slow, tedious process.

U.S. land-based and naval strike capabilities already occasion these Chinese concerns, but are intertwined with wider considerations of strategic nuclear deterrence as well as the overall U.S.-China relationship. Chinese planners would now have to worry about similar considerations in a purely Sino-Japanese bilateral context. Moving some long-range strike capability to sea would also reduce Chinese incentives to preemptively hit air bases supporting Japanese Air Force strike units.

# **Attacking Chinese Satellites**

Chinese space assets would be as vulnerable as any other orbiting systems. Japan already has some assets in space that could have military applications, and likely would have considerably more in 15-20 years. But importantly, in the event of conflict with China, it likely would continue to get much if not most of its space-based support from or via U.S. satellite systems.

If Japan were to develop anti-satellite capabilities, it could be in a position to attack Chinese military satellites while continuing to get space support from U.S. systems. China could and would no doubt retaliate by attacking Japanese space assets. But it would be in a difficult dilemma in terms of attacking U.S. systems if the conflict were still contained between Japan and China, since such attacks would assuredly bring the United States directly into the conflict on the side of the Japanese.

### Disabling Chinese Undersea Information Infrastructure (UII)

Recent real-world accidental severings of several undersea telecommunications cables have illustrated the fragile nature of the UII. While it was postulated earlier that Japan and China might forego attacking each other's UEI since both infrastructures are so vulnerable to destruction, that might not be the case for if Japan were able to contain or destroy most of the PLAN submarine force. At that point, Japanese undersea assets could be tasked to cut Chinese UII cables.

# **Conducting Cyber Warfare against China**

Given recent real-world events, it is impossible not to mention the major role that cyber warfare would inevitably play in both "cold" and "hot" future conflicts. There is strong evidence that China has highly sophisticated cyber warfare capabilities, which will only improve in the future. Presumably Japan (and the United States) are also working on similar capabilities, and planning to employ them in the event of conflict with China. Conceivably, the Japanese might even have a comparative advantage over the United States in combating China in the cyber realm given the much greater linguistic and cultural similarities between the two countries. However, to say anything further on this subject would be entirely speculative.

# **Fomenting Internal Unrest**

China periodically has experienced ethnically-based unrest, particularly in Tibet and in its western provinces. It has been particularly harsh in acting against potential separatists, or "splittists." During any potential conflict, it obviously would be in Japan's interest to incite the

maximum possible internal unrest within China. Such actions would serve to reinforce any unrest being generated from economic damage incurred during the conflict, which would both distract Chinese senior leaders and to force them to divert resources to suppressing any internal opposition.

Japan is not particularly well-situated, or perhaps well-suited, to foment this kind of trouble. First, most of the countries neighboring China from which such moves could be initiated or supported are very far from Japan, both geographically and culturally. Neither is Japan particularly well-regarded in countries with historical memories of its aggression last century. True, the direct memories of Japan's past transgressions are fading, and will have faded further in 15-20 years. However, there would be little incentive for them to risk angering an already belligerent China by supporting Japanese-sponsored opposition and separatism within that country. Moreover, the Japanese historically have been notably clumsy in attempts to engage in what would be *de facto* political warfare, which is perhaps not surprising given their long-time cultural insularity. These same factors perhaps help explain why Japan always has lacked real allies, with the exception of the United States after 1951.

This would appear to be an area where Japan could and should approach the United States and ask it to provide *sub rosa* assistance.

# THINKING ABOUT POSSIBLE JAPANESE MILITARY STRATEGIES

This chapter has considered important strategic planning factors Japanese planners should take into consideration in preparing for bilateral conflict with China. Within the discussion, various key military missions and tasks were noted or implied. The next chapter will examine how these factors might be incorporated into an overall military strategy, and then consider what the Japanese military would have had to do in the preceding years in order to be able to implement it.

# V. A Possible Japanese Military Strategy

The objectives of Japanese military strategy in the bilateral Sino-Japanese context would be to 1) deter Chinese attack on Japan; 2) defend Japan against Chinese attack; and 3) compel conflict termination on terms satisfactory to Japan.

Such a strategy must provide for adequate deterrent responses to Chinese military coercive strategies of the kinds discussed in Chapter 3. It must allow for rapid transition from crisis to outbreak of actual hostilities, including prompt execution of necessary anticipatory measures (including prior "preparation of the battlespace"). Lastly, it must enable Japan to dominate the crucial competitions or battles, the winning of which are prerequisites for prevailing in the overall conflict on satisfactory terms.

# **STRATEGY ELEMENTS**

A broad Japanese military strategy should encompass the elements described below. Some of these would be accomplished in conjunction with or with the knowledge and/or support of the U.S. military, while others would be accomplished independently as necessary or desired.

#### **Deterrence**

Japanese deterrent efforts would be focused on deterring Chinese use of nuclear and massed ballistic missile strikes against Japan, and foreclosing a large-scale Chinese pre-emption option. Japanese planners would seek to:

- Deter Chinese nuclear coercion through U.S. guarantees of extended nuclear deterrence or covert acquisition of Japan's own nuclear weapons and delivery systems;
- Deter large-scale conventional ballistic missile attack by maintaining a large ballistic missile
  force in dispersed hardened sites (includes missiles with nuclear payloads, if developed);
  declaratory policy would be that retaliation would be in kind, and not necessarily
  proportional;
- Increase the numbers and hardness of air bases to provide for dispersal and protection;
- Deploy BMD to protect major cities, ports, and bases;
- Covertly (with U.S. knowledge) develop ASAT capabilities, to be revealed in the event of Chinese attacks on Japanese space systems; and
- Respond firmly and rapidly to all Chinese military provocations, including intercept and escort of all PLAN and PLAAF surveillance patrols and transits near Japan.

# **Prior Preparation of the Battlespace**

There are various preparatory measures the Japanese military would need to carry out over a period of years, as belligerent Chinese intentions aimed at Japan became clear, in order to be able to conduct the sorts of wartime missions and tasks described earlier. These would include taking action to:

- Conduct extensive hydrographic research and bottom topography mapping of the East and South China Seas, the waters around Taiwan and in the Taiwan Strait, and along the Ryukyus island chain out to the Senkakus;
- Conduct covert undersea reconnaissance in Chinese littoral waters, concentrating on areas near major PLAN bases (especially submarine bases) and the approaches to the major oil ports;
- Develop plans with routes and locations to pre-stage undersea attack assets (e.g., UCUVs, LACMs) near sensitive Chinese targets;
- Covertly lay multiple undersea sensor arrays and emplace associated kill systems from Kyushu through the Ryukyus and Senkakus, using CCD and deception to the maximum extent possible;
- Maintain strong MCM forces in all large ports and conduct continual Q-route verification exercises for all major ports and approaches;
- Develop and regularly exercise rapid-reaction maritime traffic management plans to facilitate rapid establishment of maritime domain awareness in sea areas near Japan in the event of crisis;
- Develop Navy plans to provide tanker escorts if required on normal South China Sea routes but also for alternate wartime routes:
- Make air defense and maritime strike the primary air force missions; and
- Push for close security and other relationships with the Philippines to forestall closer Sino-Philippine relations.

### **Transition to Conflict**

Assuming the Japanese adopt the deterrent measures described above, an open Sino-Japanese conflict is unlikely to start with the "bolt out of the blue" type of attack. A more likely scenario would see a steady rise in tensions over time, then escalation over accidental or deliberate Chinese provocations. If Japan's leadership judged at a particular point that serious potential for open conflict existed, it would order various measures to enable rapid offensive and defensive operations. (One prime indicator would be PLAN flushing of large numbers of submarines.) There is a risk that such actions would be viewed by the Chinese as escalatory, but that would

have to be weighed against the risk of being insufficiently prepared for Chinese attacks and ceding China the initiative, perhaps for a prolonged period, which could result in serious strategic and operational setbacks.

As tensions mounted, Japanese forces could do any of the following:

- Disperse most forward-based aircraft to bases further away from China (though Ryukyu airbases, including Okinawa, would be highly vulnerable to attack, some fighters should be kept on those bases to avoid the perception of their abandonment);
- Heighten air defense readiness, including strike-fighter patrols along the Ryukyu island chain, which would entail significant aerial refueling operations over the Philippine Sea;
- Establish Maritime Patrol Aircraft (MPA) ASW patrols along the island chain;
- Execute the wartime maritime traffic management plans to identify Chinese and unknown shipping near Japan;
- Shift Japan-bound merchant traffic from normal South China Sea routes to more easterly routes and put naval surface forces on alert to provide convoy escort;
- Use submarines to pre-stage undersea attack assets (could potentially use nondescript merchant ships but only if such undersea assets were mobile with sufficient range to be able to close desired areas with sufficient power reserves to be activated later);
- Establish ASW barriers across Luzon Strait (will likely have to be done with submarines and fighter-escorted MPA unless Japan had been able to establish close security relations with the Philippines); and
- When tensions become acute, station all available (i.e., not otherwise tasked) submarines to
  mask known major PLAN submarine bases in effort to attrite Chinese submarines as they
  sortie (note: while this is a highly desirable goal, it is not likely to have great success in that
  the PLAN likely would have sortied many subs if it knew war were about to be initiated by
  China, plus diesel submarine endurance is relatively limited).

### **Open Conflict**

The broad outlines of the Japanese war strategy would be to:

- Maintain mutual deterrence against use of nuclear weapons and massed conventional ballistic missiles;
- Keep PLAN and PLAAF assets outside of weapons release range of Japan;

- Prevent large-scale PLAN submarine breakouts through the island chains (this is the crucial campaign that must be won in order to preclude major attrition of Japanese shipping and naval surface forces and prevent non-air defensive forces from defending the Ryukyu air and undersea sensor sites from attack, with deleterious effects both on air defense of Japan and the overall Japanese ASW campaign);
- Deny the East China Sea, the Sea of Japan, and the western Philippine Sea to PLAN surface forces (using primarily Air Force maritime strike aircraft in order to free up submarines for commerce destruction, selected strike, offensive mine warfare, and limited ASW);
- Use Ryukyu targets to draw PLAAF strike-fighters into attrition battles with superior Japanese fighters; employ stealthy fighters with long-range air-to-air missiles to kill or drive back Chinese AEW and strike direction platforms;
- Employ submarines and offensive mining to sink Chinese tankers as part of energy interdiction campaign;
- When PLAN submarine problem is largely under control, isolate Taiwan by heavy mining of Kaohsiung and the other two main ports, and destruction of major oil transshipment point and major cargo handling infrastructure;
- If the judgment is made that striking Taiwan does not constitute striking the Chinese homeland, steadily strike military targets on Taiwan to attrite PLAN and PLAAF forces (including drawing in and killing other Chinese units brought in as reinforcements), and energy infrastructure to increase pressure on the Chinese leadership by inflicting growing hardship on the population;
- As availability of undersea forces increases (from completion of other missions), progressively bottle up major PLAN bases with emphasis on submarine bases.

If nuclear and ballistic missile mutual deterrence continues to hold after these actions,, Japan would be well-positioned to maintain pressure on China, while China would be ill-positioned to do the reverse (other than cause the continuing financial drain on both sides of fighting on). The conflict would terminate only when one (or both) sides concluded that the marginal costs of continuing were not worth the marginal gains of continuing. Japan would appear to hold an asymmetric advantage.

If China makes only limited attacks against selected homeland targets, Japanese retaliation likely would be similarly limited, though target selection might be asymmetric. Even while emphasizing that its attack was in retaliation for Chinese attacks, Japan could choose to use the "opportunity" to hit a different type of target (e.g., strike major oil refineries) or use a different means (e.g., LACMs),. Or, if China used ballistic missiles against, targets on Okinawa but not the Japanese main islands, Japan could strike targets on Taiwan like critical Kaohsiung harbor

cargo handling facilities, or perhaps the Satellite Launch Center on Hainan island, and argue the non-mainland equivalency of such targets.

Obviously there is serious risk of miscalculation and possibly altering perceptions of the stakes of the war on both sides. Repeated use of ballistic missiles when both sides have substantial inventories of them would be a dangerous and unpredictable game.

### **IMPLEMENTATION**

Japanese ability to carry out a strategy like the one described above is predicated on a steady, long-term expansion of its military forces and capabilities. Such an expansion likely would entail:

Steady build-up of a large offensive conventional ballistic missile force. Building a powerful offensive ballistic missile force would likely be the single most important deterrent move the Japanese could make. It would signal Japanese intent to become a more normal nation, responsible for its own defense. Japan essentially would also be signaling that China would not be able to coerce Japan in the way it did to Taiwan. Note that investing in such a force would also entail investing in the hardened basing structure required to defend it against preemptive attack.

Steady expansion of Japanese ballistic missile defense capabilities. Deterrence would also be facilitated by improved Japanese ballistic missile defense capabilities. In addition to expanding its sea-based ballistic missile defense capabilities, the Japanese would do well to procure additional PAC-3 terminal defense batteries, as well as a land-based area defensive system such as the US THAAD system. Japan should also invest in research and development of directed energy ballistic missile defenses.

Steady increases in naval forces and capabilities, with particular emphasis on a large force of long-range, high-endurance submarines. In sea areas like the East China Sea that would be unsafe for surface warships for a considerable time, undersea forces would dominate and be in very high demand. Given the large distances in the theater and the range of missions submarines would have to carry out, plus allowing for maintenance and attrition, the Japanese Navy arguably should become submarine heavy. To maximize their operational flexibility, the ideal submarines would be long-range, high-endurance conventional diesel-electric boats with an air independent propulsion plant with large payloads. With no need for separate naval aviation, and little need for many large surface combatants (but numerous smaller ones for convoy escort and maritime domain awareness operations), such a force would appear to be both feasible and desirable. Nuclear submarines could be added to the order of battle if desired. However, their significant advantages in terms of endurance and range would have to be balanced against the associated high costs for procurement, maintenance, and recruitment and retention of highly skilled personnel. Note that the size and make-up of the future PLAN submarine force (i.e., the number of SSNs versus diesel-electric boats) likely would be the most important driver of the composition of the Japanese submarine force.

Steady building of undersea combat networks along the southwestern island chain, the Japanese main islands, and the approaches to major harbors. The sensoring (and associated integration of undersea kill mechanisms) of Japanese undersea areas is central to winning the initial ASW battle, and important for defending the major ports against those PLAN submarines that do break out. Because of its favorable island geography, and to free up manned submarines for higher priority missions, development of different types of unmanned combat undersea vehicles (UCUVs) should be a high Japanese priority.

Steady acquisition of a sizable 5<sup>th</sup> generation fighter force. Maintaining air dominance over and near Japanese territory would be the key to preventing Chinese non-missile attacks against Japan, and driving China towards a position of either using ballistic missiles, with all the escalation perils that entails, or leaving the Japanese homeland essentially untouched. The preferable aircraft is the stealthy F-22. Since Japan is already "within theater," the F-22's relatively short range is less of a factor for the Japanese Air Force than it arguably is for the U.S. Air Force. Besides its military utility, U.S. sales of an F-22 variant to Japan would be a highly visible signal to China about the mutual importance of the U.S.-Japanese security alliance.<sup>71</sup>

Steady build-up of large specialized weapons inventories. Japanese ability to conduct a long war would likely be a powerful deterrent against China. Moreover, it would obviate a Chinese calculation that it could outlast Japan in a prolonged conflict. A key element of this would be large stocks of key weapons, including precision guided munitions (PGM), LACMs, ASCMs, and offensive undersea weapons.

Steady acquisition of large numbers of diverse UAVs. A large inventory of both sophisticated (expensive) and simple (cheap and/or disposable) UAVs would be exceptionally useful for a range of missions and tasks. For example, given the large expanses of ocean to be covered along the Ryukyus chain, high-endurance UAVs would help provide persistent surveillance, including against snorkeling diesel submarines and small raiding parties seeking to destroy Japanese surveillance sites on remote islands. Simpler UAVs could act as decoys of various kinds, forcing Chinese defenders to expend energy and ordnance engaging them for fear that they were of the more dangerous kind.

Shifting peacetime Air Force aircraft basing steadily towards southwestern Japan (including various Ryukyu island bases), but building and maintaining additional bases with hardened revetments in eastern Honshu and Hokkaido as dispersal sites. In peacetime, Japan would want to maintain a strong air presence forward, not least in order to be able to intervene to protect its shipping transiting the South China Sea and meet Chinese challenges, e.g., over conflicting EEZ claims. China might well mistake failure to do so as a sign of weakness, and be further emboldened to increase its control over navigation and other activities there and elsewhere. But

<sup>&</sup>lt;sup>71</sup> U.S. sales of sophisticated fighters (not the F-22 for several reasons) to India would send a similar signal, as well as complicate Chinese defense planning, though this would have to be weighed against the impact on Pakistan.

Japan must also be able to disperse aircraft readily in order to avoid offering too lucrative targets for pre-emptive attack.

Steady expansion of Japanese Air Force aerial refueling capability. The combination of long distances and the high vulnerability of forward air bases will require that most forward air defense (and strike) assets operate from bases further back in wartime. This, in turn, will create a high demand for aerial refueling capacities in order to keep sufficient aircraft on station. The Japanese have recently purchased their first four aerial tankers. It seems likely that Japan should increase this initial buy by at least an order of magnitude, if not more.

The adaptation of selected naval and strike air platforms to be readily nuclear capable platforms. This would contribute to deterrence as an indicator of the rapid ability of Japan to go nuclear. This obviously would be a sensitive issue, and would require U.S. concurrence. Note that this would entail having plans ready for nuclear training and maintenance infrastructure if the decision were made to "go nuclear."

Strong emphasis on the civilian space program. The primary reason for this is not for military purposes, at least directly, since Japan would have access to the support and intelligence from U.S. space assets. Instead, a major space program would provide Japan the expertise and capacity to build up its ballistic missile force, and to adopt longer-range offensive ballistic missiles if it chose to do so.

# **ACCOMMODATING JAPANESE STRENGTHS**

The preceding discussion has described a possible Japanese strategy for dealing with a belligerent China, as well as the military capabilities that would be required to execute it if called upon. A military force like that described above would take advantage of some notable Japanese strengths.

The force would not be heavily manpower-intensive, avoiding as it does large ground forces and large manned surface ships. It would rely relatively heavily on substitution of technology for manpower in many respects, e.g., emphasis on remote networked sensor arrays and C4ISR systems, precision weapons, and unmanned undersea and aerial vehicles. As such, it is compatible with trends already long underway in the Japanese economy. Japanese research and development (R&D) and science and technology (S&T) prowess is top-notch in many areas having military application. The Japanese education system turns out large numbers of well-educated, highly skilled graduates who could easily be trained to design, produce, and operate complex military systems, both in cooperation with U.S. defense firms and the U.S. military, or independently in many cases.

The final chapter will address some possible implications for the United States were Japan to acquire this kind of much more powerful military.

# VI. IMPLICATIONS FOR THE UNITED STATES

A future rearmed Japan of the sort depicted in this paper would impact the regional political and security dynamics considerably. It would also alter the U.S.-Japanese security relationship in multiple ways.

### ADVANTAGES AND DISADVANTAGES

A rearmed Japan would provide various advantages and disadvantages both for the United States and for Japan. From the U.S. perspective, the advantages that the United States would accrue from a rearmed Japan would likely substantially outweigh any disadvantages, especially in the near- and mid-terms.

### Addition of "Virtual" Force Structure

China is the only potential real competitor to Japan in East Asia. Even if Russia were able to recover from its many formidable problems and once again become great power, it would face the same problems that the Soviet Union did during the Cold War in maintaining its power in the Far East, and thus would be unlikely to constitute a real threat to Japan.

The large mooted expansion of Japanese air and naval force structure would be motivated by defense against a powerful, belligerent China. Such a China also would constitute a formidable strategic competitor for the United States. Thus, given a common adversary, as well as the assumption of high levels of U.S.-Japanese interoperability, the additional Japanese force structure would be functionally equivalent to additional U.S. force structure in the western Pacific theater. A rearmed Japan, parenthetically, also would reduce the contemporary U.S. "free rider" problem considerably, at least in the Pacific. 72

Such additional allied force structure would help increase U.S.-Japanese combined operational timelines in the event of conventional limited war with China. On the assumption that such a war would remain largely maritime in nature, larger "factor inputs," e.g., more submarines, would speed up campaigns to, e.g., neutralize the Chinese submarine threat, establish higher levels of maritime domain awareness near Japan faster, increase attrition of Chinese maritime traffic, and so forth.

<sup>&</sup>lt;sup>72</sup> Parenthetically, larger Japanese forces also could represent a significant boost for the U.S. defense industrial base, especially if the United States were to allow Japan to buy high-end items like the F-22. Larger joint buys of bigticket assets could lower defense costs as well by enabling economies of scale as well. This is one of the principal rationales for producing and selling the F-35 to many allied states.

# **Complication of Chinese Strategic Planning**

Instead of a two-sided competition between China and United States, with Japan as a sort of "tame" U.S. client state, with a rearmed Japan China would be faced with two separate powerful regional competitors. While the Japanese military would remain dependent on U.S. support to some degree, it would be capable of many kinds of independent military operations. The difficulty for Chinese planners would be that they could never be certain of the true state of the U.S.-Japanese alliance at any given time, especially regarding the amount of "control" the United States would have over Japanese actions. This would become even more of an issue were Japan to acquire (or be thought by the Chinese to have acquired) nuclear weapons and delivery systems.

The role that France, and, to a lesser extent, the United Kingdom (given the closeness of its relations with the United States), played vis-a-vis the Soviet Union during the Cold War is suggestive. Their independent nuclear forces always presented the Soviets with the problem of how to deal with multiple nuclear actors in the event of a crisis or even war in Europe.

# **Greater Japanese Regional Weight**

As noted earlier, China has had some success in increasing its own regional political and economic influence while diminishing both Japanese and U.S. influence. This has been partly due to regional concerns over waxing Chinese military power, to which today's Japan plays virtually no role in counter-balancing because it has only limited military capabilities dedicated solely to self-defense. To the extent Japanese military power, tempered politically by continued alliance with the United States, becomes a meaningful factor in balancing China's growing military strength in the region, perceptions of relative Chinese power likely would be diminished in urgency. This might result in slowing or arresting nascent tendencies in regional states to see China as the emerging dominant East Asia power, with which it would be wise to make the best possible long-term accommodation.

# **More Sophisticated Japanese Policy Thinking**

Official Japanese thinking about foreign and security policy matters is moribund in many ways. Much of this stems from the disastrous defeat in World War II, which effectively demilitarized Japan ever afterwards in terms of forces, but also from the lack of strategic thinking at the highest levels of the Japanese government. This was *de facto* encouraged by the United States during the Cold War when it was useful to have what was in effect a tame client state that provided useful basing for U.S. forces. As a consequence, three generations of Japanese officialdom have not had to engage in serious thinking about security problems.<sup>73</sup>

By their very nature, the circumstances that would lead to a Japanese decision to rearm comprehensively would require Japanese leadership to start thinking in serious ways about the

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<sup>&</sup>lt;sup>73</sup> It is notable that Japan only reestablished a Ministry of Defense in early 2007, the predecessor Japanese Defense Agency having been merely a sub-cabinet-level organization.

security issues facing the country. One of the principal aspects of this would be relearning the role of military power in peace and war, and in particular how it would best complement other facets of Japanese national power.

A Japan that became more of a legitimate partner and powerful ally rather than a *de facto* client state could prove quite useful to the United States in a variety of forums, in contrast to the reality today. As an illustration, during the bitter arguments with traditional U.S. allies in the run-up to the 2003 Iraq war, Japan tended to support the U.S. position. But that support was given virtually no weight in the national and international debate at the time, principally because Japan was not regarded as a significant power. A "normal" Japan would have the standing to make its voice heard in a serious way.

The possible downside of this from a U.S. perspective would be that the United States would have significantly less control over a more mature, independent ally. A possible consequence is that it potentially could get dragged by Japan into difficult situations, especially with respect to China, in a manner perhaps analogous to the way the United States is in some ways "held hostage" by the actions of North and South Korea today. Especially if a rearmed Japan were still dependent in some critical ways on U.S. military support, even if only non-combat in nature, it could still argue that the United States had the alliance obligation to support Japan (or help Japan get out of trouble).

### A Nuclear-Armed Japan

A nuclear-armed Japan would even more seriously complicate Chinese strategic planning. Arguably only the Soviet Union has had the experience of having to plan simultaneously against multiple serious nuclear weapons states. It is unclear how the dynamics of a Sino-Japanese nuclear arms race would affect those of a hypothetical U.S.-China nuclear arms race, or an even more difficult n-sided great power nuclear arms race. This would be further complicated if the Nuclear Non-Proliferation Treaty (NPT) regime fell apart altogether as may well become the case given the dynamics of, especially, the Middle East.

At this point, it is difficult to assess the net benefit or cost of Japan acquiring nuclear weapons, or under what circumstances the United States should support Japan in doing so. It should be self-evident that this bears near-term study by the Department of Defense, because the circumstances under which it could happen might occur much faster than expected.

### OPEN QUESTIONS

There are some important questions U.S. policymakers ought to ask themselves in thinking about the kind of rearmed Japan depicted in this paper. These might include:

<sup>&</sup>lt;sup>74</sup> It will be remember that Japan's financial-only contribution to the 1991 Iraq war was met with considerable scorn by most members of the Desert Shield/Desert Storm coalition for much the same reason.

- Does a powerful rearmed Japan strengthen or weaken the U.S.-Japanese alliance?
- What does a rearmed (and a rearming) Japan incentivize or disincentivize China to do?
- Does a rearmed Japan still dependent on U.S. military support in important ways give the United States leverage over China by virtue of (perceived) ability to modulate Japanese behavior?
- How would the various possible transitions from today's Taiwan and Korean situations impact Japanese decisions and motivations to rearm, and, by implication, U.S. support or opposition to such a Japanese course of action?

Such questions, and no doubt additional ones, should be taken into consideration and studied thoroughly by the Departments of Defense and State. The alternative future world considered in this paper is quite different than today's, yet it certainly is conceivable that a future Japan may not remain content to let the United States be its sole protector in a historically dangerous neighborhood. Its history suggests that Japan's thinking and actions can change remarkably quickly once the proper stimulus is applied, so it perhaps would behoove the U.S. government to start thinking seriously about a Japan that could be quite different from that of today.