
**IMPLICATIONS FOR THE MILITARY AND USAF:
THE CHALLENGES OF CHANGE**

The USAF's ability to support U.S. national interests in a rapidly changing Asia will demand great flexibility. The existing Air Force posture in the region may, however, be inadequate or poorly configured to carry out the full range of tasks it might face. This chapter will therefore discuss steps the USAF might take to prepare for the Asian environment it could confront over the next two decades. We will focus on three broad topics: shaping the regional environment, responding to crises, and thinking about the long term.

SHAPING THE ASIAN SECURITY ENVIRONMENT

For the past 50 years, the focus of U.S. attention has been in Northeast Asia, where the Cold War confrontation between North and South Korea continues. Today and in the future, however, U.S. interests—which include coping with an uncertain China, supporting stability in the volatile countries of Southeast Asia, and reducing the risks of the Indo-Pakistani nuclear rivalry—are and will continue to be spread throughout this vast region. The U.S. military posture in the Western Pacific must therefore adapt over time to support the region's new needs.

If and when the two Koreas reach some form of stable accommodation, changes in the numbers and kinds of U.S. forces stationed in Asia will likely be forthcoming. However, any alterations in U.S. posture should be made only after considering the full range of American interests and objectives in the region. If changes are made

prudently, the United States could be better prepared to protect and advance its goals in East Asia as a whole even if it is moved to reduce the absolute size of its military forces permanently stationed in the region.

The large U.S. Marine Corps force on Okinawa, for example, is a source of ongoing friction between Washington and many Okinawans. Positioned to respond quickly to a crisis on the Korean peninsula, this force may decline substantially in strategic and military value if the prospects for a second Korean War are finally reduced. Reducing and/or relocating this force—to Guam, perhaps, or to Hawaii—would remove a perennially contentious issue from the agenda of U.S.-Japanese relations while not significantly diminishing U.S. capabilities for rapidly responding to events in East Asia.¹

The size of U.S. Army and USAF forces stationed in Korea would almost certainly be reconsidered as well should the threat of war between Pyongyang and Seoul recede. Under such circumstances, support for continued American deployments on the peninsula will likely waver in both Korea and the United States. In addition, the Korean government could resist continued payment of host-nation support (HNS) to the United States, particularly if Seoul is, as seems likely, incurring large costs as a result of reconciliation or reunification with the North. Moreover, North Korea has in the past insisted that a U.S. troop withdrawal be a precondition for reunification with the South, although this stance may be changing.² Finally, Korea could find itself under pressure from its regional neighbors—China and Russia in particular—to evict or at least reduce the number of U.S. forces on its territory.

As on Okinawa, it would seem that large ground-force units would be the most obvious targets for selective drawdowns. The U.S. Second Infantry Division in Korea has a unique structure and is specifically configured to fight on the peninsula. Unlike lighter formations such

¹At least at first glance, the most likely conflicts in a post-Korea Asia—China-Taiwan, India-Pakistan, or an Indonesian implosion—do not seem to be the kinds of scenarios that call for the commitment of a large combined-arms Marine force. While smaller Marine units and specialized Marine capabilities may be valuable in many future Asian contingencies, the maintenance of a large U.S. Marine Corps presence on Okinawa may not be an effective use of limited U.S. political capital in the region.

²See Struck, “South Korean Says North Wants U.S. Troops to Stay” (2000), p. A1.

as the 82nd Airborne or 10th Mountain divisions, it is not designed to be strategically mobile and hence would not necessarily be appropriate for a post-Korean unification role as a rapid-reaction force for contingencies across Asia at large. Therefore, some reduction in the number of Army troops deployed in Korea might be an initial option if some U.S. withdrawals become necessary.

The USAF currently deploys four fighter squadrons at two main operating bases (MOBs) in South Korea. The strategic reach of airpower may make it desirable to try to keep these forces in place even after Korean reconciliation, but pressures to reduce may eventually prove irresistible. At the least, the Air Force should be prepared to consider the implications of eliminating one MOB and moving one or two squadrons elsewhere in the region, perhaps to Guam.

There are important political reasons to try to maintain at least some presence in Korea even after the threat of a North Korean invasion has disappeared. As discussed in Chapter Three, for example, the departure of all U.S. forces from Korea would leave Japan the sole host of permanent U.S. military installations in East Asia, and how satisfied Tokyo would be with such an arrangement given its history of uneven popular support for foreign bases—particularly if China and Russia applied heavy pressure on Japan to expel the Americans—is unclear. In addition, the lingering animosity between Korea and Japan has been mitigated by the ongoing U.S. presence in both countries, arguing for the retention of a U.S. presence in a unified or reconciled Korea.

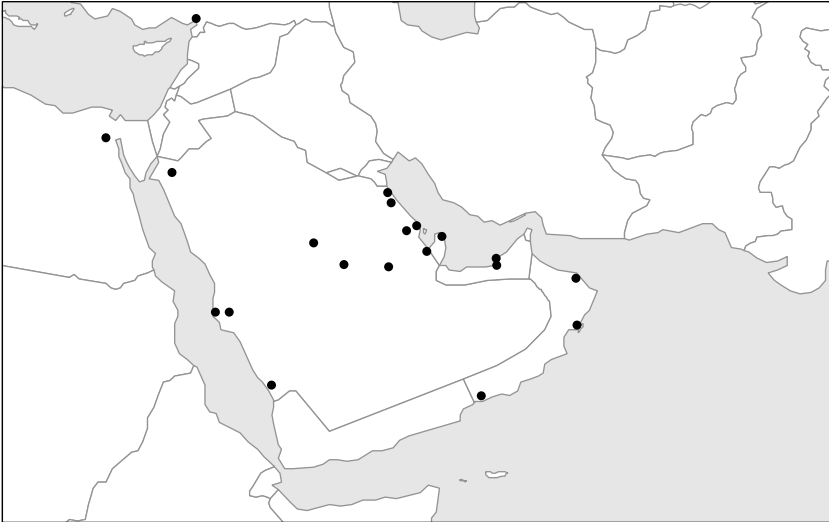
RESPONDING TO CRISES

It is easy to forget just how large and diverse Asia is. The tyranny of this vast geography (Figure 4.1 identifies, on maps drawn to scale, USAF bases in Asia and those used during the 1990–1991 Gulf War) has much to say about how the USAF should position itself to enable quick and effective reaction to emerging crises. To better reflect this geographic diversity, we have divided the discussion into four sections, each dealing with one area: Northeast Asia, Taiwan, Southeast Asia, and South Asia.

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a. Asia



b. Persian Gulf

Figure 4.1—Comparative Sizes of Asia and the Gulf War Theater

As Figure 4.1 illustrates, the availability of adequate basing is a critical component that will help shape the USAF response to any crisis in Asia. We have examined a number of bases across Asia and have evaluated the capacity to support USAF flight operations. This assessment focused on the five key attributes shown in Table 4.1: the length of the runway(s) at the facility, runway width, the amount of ramp space, the number of fighter-sized parking spaces available, and whether or not weapon storage was available. We also looked at pavement-loading characteristics (which are critical to operating large, heavy aircraft such as airlifters), the availability of fuel, and other factors.

Although the suitability of a base is specific to mission and aircraft type, the number of bases and facilities at each of those bases can be used as a measure of a region's capability to support USAF operations. For analytical purposes, we divided the bases we examined into four broad categories: minimal, small, large, and support.³ A "minimal" airfield is the smallest base from which any sort of fighter operations could be conducted. Such an installation has short runways that are near the bare minimum of many fighters and C-130 aircraft along with limited parking areas that could support a squadron or two of fighter aircraft at most. A minimal base is not suitable for sustained fighter operations but could be used if better alternatives were not immediately available.

Table 4.1
Airfield "Class" Minimum Requirements

Airfield Attributes	Minimal	Small	Large	Support
Runway length (feet)	4000	7500	8500	11,000
Runway width (feet)	75	100	140	140
Ramp space (square feet)	100,000	200,000	200,000	1,000,000
Number of fighter parking spaces	24	48	72	0
Weapon storage	yes	yes	yes	yes

³See D. A. Shlapak, J. Stillion, O. Olikier, and T. Charlick-Paley, *A Global Access Strategy for the U.S. Air Force*, Santa Monica: RAND, MR-1216-AF, forthcoming.

A “small” base is one that is fairly well suited to fighter operations. A small base has runway dimensions significantly larger than those of a minimal base and parking space for two or three squadrons of aircraft types. The longer runways could also support the operation of some larger aircraft.

A “large” base is well suited to conducting a wide range of combat operations. Such a facility has ample parking space for at least a wing of fighter-size aircraft and runway dimensions adequate for the majority of USAF aircraft, including heavy bombers and strategic airlifters.

Finally, we define a “support” base as one that is suitable for large-scale aerial port debarkation (APOD) operations. This base is characterized by very long runways and vast amounts of ramp space.

Throughout this chapter, these classes of airfields will be used to identify current capability in each of the regions discussed. In many cases, the requirement for munitions storage inhibits a base from appearing on our list. Although munitions storage could be added as well as runways lengthened or widened or concrete strength enhanced, our purpose was to identify bases that would likely require limited USAF improvement to support military operations. Immediate ease of use is especially important to an air force based around an expeditionary mindset.

The identification of bases that are currently capable (or nearly so) of supporting USAF operations has both political and financial advantages. There appears to be little appetite, either in the United States or in the region, for the construction of additional American military installations in Asia. The bases identified in this analysis should not require significant upgrades that could be costly in terms of either USAF budget dollars or American political capital.

The United States does enjoy close relations with a number of Asian countries besides Japan and Korea and should work to further expand its network of friends in the region. In the near term, access strategy for Asia should center on increasing opportunities for deployments and exercises and on the development of contingency agreements with a number of potential security partners in the area. Depending on the closeness of the resulting relationship, this could include measures to tailor local infrastructure to USAF operations by

extending runways, improving air traffic control facilities, repairing parking aprons, and the like.

Northeast Asia

Northeast Asia, which includes both Japan and Korea, has been the long-time focus of U.S. attention in the Western Pacific. As such, it is well served by the existing U.S. base structure in the region: All permanent USAF bases in Asia, with the exception of Guam and Diego Garcia, are in the northeast.

The most likely crisis to erupt in Northeast Asia remains a conflict between North and South Korea. The centerpiece of U.S. Pacific planning for nearly a half-century, war in Korea would see hundreds of combat and support aircraft poured into a small area of operations. Geography would thus seem to dictate that all short-range combat aircraft be based either in Japan or on the peninsula itself.

Current USAF bases located in South Korea and Japan are shown in Figure 4.2. The circles in this figure indicate distance from the Korean demilitarized zone (DMZ), with the inner circle being 500 nautical miles in radius and the outer circle 1000 nautical miles. Current U.S. bases have well-developed infrastructure to support combat operations. The two bases in Korea, Osan and Kunsan, are within 500 nautical miles of the DMZ, while Misawa, Yokota, and Kadena are between 500 and 1000 nautical miles away. In addition to the current USAF bases in the area, a number of other airfields exist with well-developed infrastructure. Figure 4.3 shows all bases in the region that meet the minimum requirements in Table 4.1. The USAF could not operate in the near term from all airfields presented in Figure 4.3, but this information gives an indication of the degree of development of the airfield infrastructure in this region.

Considering the current size and sophistication of North Korea's missile arsenal, Pyongyang cannot realistically hope to degrade USAF flight operations with conventionally armed Scuds, FROGs, and Nodongs.

The USAF strategy of short-range operations, however, could become increasingly dangerous if the current standoff between Seoul and Pyongyang continues long enough to permit the North to effec-

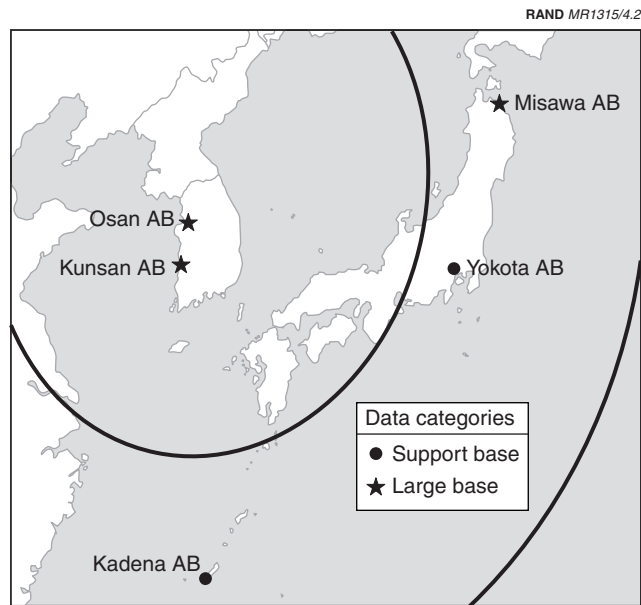


Figure 4.2—USAF Bases in South Korea and Japan

tively deploy a larger force of more modern missiles that proved capable of striking installations in South Korea and Japan. A new generation of ballistic missiles could be accurate enough to impede USAF operations using conventional warheads (especially if the North could successfully integrate submunition-dispensing warheads on the weapons).⁴ Current North Korean missiles could have a major impact on USAF operations if they were fitted with chemical or nuclear warheads. Bases in South Korea would probably also come under intense attacks by North Korean special operations forces (SOF), which could cause extensive damage and disruption either independently or coupled with missile strikes.⁵

⁴For a thorough discussion of the possible effects of conventional missile attacks on airbases, see John Stillion and David T. Orletsky, *Airbase Vulnerability to Conventional Cruise-Missile and Ballistic-Missile Attacks: Technology, Scenarios, and U.S. Air Force Responses*, Santa Monica: RAND, MR-1028-AF, 1999.

⁵See David A. Shlapak and Alan Vick, *“Check Six Begins on the Ground”: Responding to the Evolving Ground Threat to U.S. Air Force Bases*, Santa Monica: RAND, MR-606-AF, 1995, for a discussion of the potential risks posed by SOF attacks on airbases.

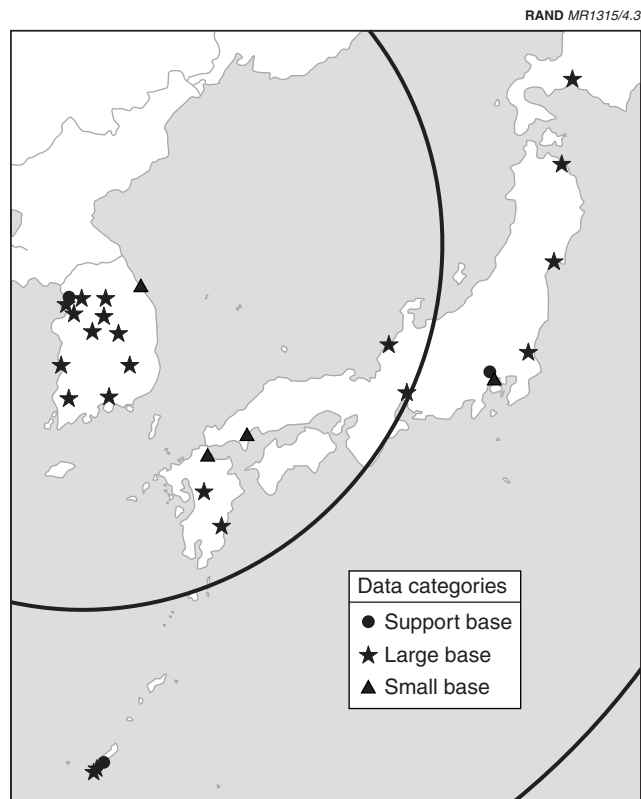


Figure 4.3—Northeast Asian Airfields

The USAF may therefore wish to consider what steps would be appropriate to maintain its ability to fight effectively in Korea if it appears that reunification or reconciliation there is going to be indefinitely prolonged.⁶ Highly effective defenses against missile and SOF attacks may be needed as well as the reliable capability to sustain high-tempo combat operations in the face of enemy attacks.

⁶Despite the hopes raised by the June 2000 summit and related developments, it may nonetheless be prudent for military planners to continue contemplating how best to defend the peninsula against a future threat from North Korea lest some future White House be caught unprepared when, all forecasts of imminent collapse aside, the North chooses or feels compelled to strike.

Taiwan

In contrast to a Korean war, a Taiwan scenario could present the U.S. armed forces with a host of relatively unexamined issues that would have to be resolved quickly to facilitate a sufficiently rapid response. Thinking about this potential mission, however, is complicated not only by the political sensitivities involved but also by a lack of clarity about what the conflict scenario would look like.

In the near term, China does not appear to be capable of mounting an invasion of Taiwan.⁷ If China does decide to use force against Taiwan, it is much more likely to do so in a manner calculated to achieve a quick political/psychological effect that would induce the Taiwanese to seek some sort of accommodation. Since there are several different ways in which this could be done, the U.S. armed forces, if they are assigned the mission of helping defend Taiwan against a Chinese attack, must consider how the effect could be thwarted no matter which approach China chooses.

Possible Chinese courses of action short of invasion could include:

- provocative exercises and tests (e.g., the 1996 missile tests to ocean areas near Taiwan's major ports);
- provocative air activities near or over Taiwan;
- small-scale missile attacks on Taiwan;⁸
- larger-scale missile attacks designed to harm Taiwan's economy, degrade its self-defense capabilities, and demoralize its population;
- interference with SLOCs via mining, submarine attacks on commercial shipping, and blockade;

⁷See the discussion of Taiwanese air base survivability in David A. Shlapak, David T. Orletsky, and Barry Wilson, *Dire Strait? Military Aspects of the China-Taiwan Confrontation and Implications for U.S. Policy*, Santa Monica: RAND, MR-1217-SRF, 2000.

⁸According to press reports, during a trip to China in late 1994, former Assistant Secretary of Defense Charles Freeman was told that "the People's Liberation Army had prepared plans for a missile attack against Taiwan consisting of one conventional missile strike a day for 30 days." See Patrick E. Tyler, "As China Threatens Taiwan, It Makes Sure U.S. Listens," *New York Times*, January 24, 1996, P. A3.

- seizing of an offshore island, one or more of the Pescadore Islands (in the Taiwan Strait), or Taiping Island (the Taiwanese-held island in the South China Sea); or
- missile and air attacks against Taiwan designed to destroy Taiwanese military capabilities.

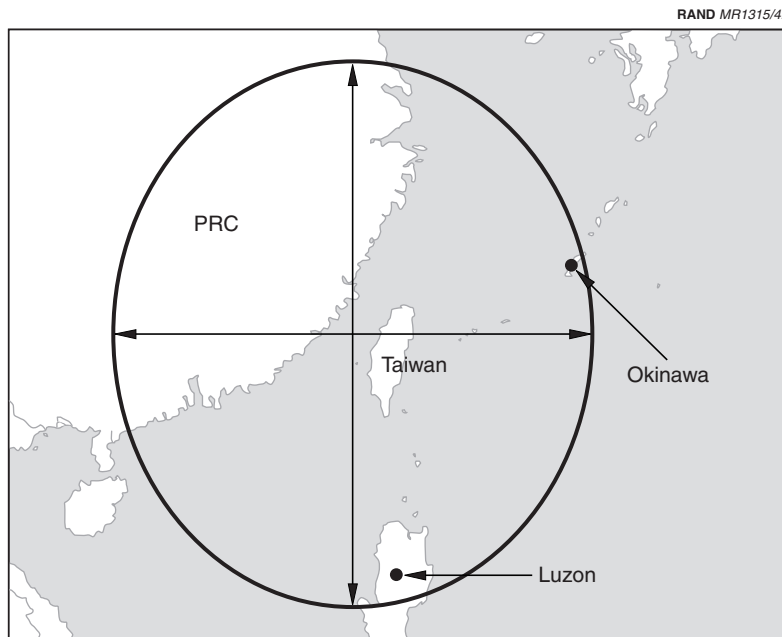
None of these options would be sufficient to compel the Republic of China (ROC) government to surrender, nor presumably would they be intended to do that. Instead, their purpose would be to demoralize the Taiwanese population, create financial and economic havoc, and bring about a collapse of the ROC's resistance to "one country, two systems." Accordingly, the point of any U.S. military action would be primarily to counteract the psychological pressure being inflicted by the Chinese, much as the dispatch of two carrier battle groups in 1996 served as a counterweight to the Chinese missile tests directed at the waters near Taiwan's two main harbors. U.S. response to a future Chinese pressure campaign against Taiwan should similarly be designed to reassure Taiwan that China cannot successfully escalate its use of force so as to inflict a decisive military defeat; to help defend Taiwanese economic and other assets; and, more generally, to bolster Taiwanese morale and prevent panic.

U.S. military assistance must therefore be available promptly to counteract the shock of Chinese action before Taiwan's will to resist begins to fade. It must also be effective, at least in the sense of being seen to respond to the military threat.⁹ While China's ability to harass Taiwan can be only partially affected by whatever military steps the United States takes in response, the psychological effect of that harassment can be negated, at least in part.

To maintain the option to assist Taiwan in case of a future conflict with China, USAF planners must come to grips with the operational requirements of projecting power into the East China Sea. Basing is

⁹Perhaps regardless of its actual military utility. For example, the Patriot missiles sent to Israel in response to the Iraqi Scud attacks during the Gulf War served the political purpose of reassuring the Israelis and dissuading them from retaliating against Iraq; the actual military effectiveness of the Patriots, on the other hand, is still being debated. The Scuds, whose military effectiveness, thanks to their inaccuracy, was quite small, were a psychological (or terrorist) weapon against Israel, and they were met with a primarily psychological defense.

one crucial problem confronting the USAF in any Taiwan scenario. As Figure 4.4 shows, a 500-nm-radius circle drawn from the approximate center of the Taiwan Strait encompasses vast areas of ocean but very little land (outside of mainland China).¹⁰ In the near term, there would thus appear to be two options: basing on Taiwan itself and basing in Japan.¹¹



Circle is 500 nm in radius. It appears elliptical owing to the curvature of the earth

Figure 4.4—Bases Within 500 nm of Taiwan

¹⁰We picked 500 nm as a rough estimate of the unrefueled combat radius of current and next-generation U.S. fighter aircraft such as the F-15, F-16, F-22, and Joint Strike Force (JSF). The actual operational range of these aircraft will vary with their configuration and mission profile, but our analysis suggests that 500 nm is a fair heuristic. See Shlapak et al. (forthcoming).

¹¹U.S. bases in Korea are more than 800 nm from the Strait, Misawa in northern Japan is more than 1400 nm away, and Guam is more than 1500 nm distant. Fighters can operate from these ranges, but sortie rates can suffer significant degradation unless substantial aerial refueling resources and additional crews are deployed. See Shlapak et al. (forthcoming), especially Chapter Three.

The critical question regarding basing in Taiwan is not principally whether the Taiwanese would permit the United States to use their bases, as the answer is almost certainly affirmative. Indeed, it is difficult to imagine anything that would make Taipei happier than to have USAF jets sitting on Taiwanese soil during a crisis with the mainland. However, it is also difficult to imagine anything that would anger Beijing more than seeing U.S. forces arrive in Taiwan during a period of heightened tension between the PRC and ROC. Indeed, it seems likely that any deployment of foreign forces into Taiwan would serve as a trigger to transform a simmering crisis into outright conflict.¹² Politically, then, USAF basing on Taiwan is an explosive and potentially unrealistic option.

From an operational perspective, basing on Taiwan is similarly problematic. To avert catastrophic political consequences, any deployment would probably have to be delayed until substantial hostilities were already under way, meaning that USAF forces would be landing at air bases that could be under heavy bombardment by Chinese missiles and aircraft and under assault by SOF.¹³ Yet the Air Force has little if any practical experience in commencing and sustaining operations under such conditions, and even if potential USAF operating locations were not under attack when forces arrived, deploying units would essentially be moving onto the bull's-eye for virtually every offensive system in the Chinese inventory.

Taiwan's basing infrastructure is also limited, with only six to eight bases designed to support high-tempo fighter activity. ROC air force (ROCAF) units, of course, occupy and use most of these installations, but visits to two active ROCAF bases and discussions with Taiwanese officers suggest that these bases were neither built nor intended to accommodate foreign expeditionary forces. Unlike Saudi Arabia, there is not an abundance of extra infrastructure available into which USAF forces could easily flow.

Further, existing ROCAF bases would offer limited operability and sustainability in the face of large-scale attacks. The bases rely on

¹²The positioning of foreign forces on Taiwan is one of Beijing's often-stated conditions for initiating the use of force against the island.

¹³Taiwan's air bases would almost certainly be a focal point of any large-scale Chinese offensive against the island.

above-ground fuel storage, for example, and fuel distribution depends on tanker trucks rather than on the much more survivable system of buried pipelines and in-shelter hydrants used on many NATO bases. We observed a number of unhardened maintenance and control facilities at the bases we visited, and the Taiwanese have only limited capability to perform rapid runway repair. Absent significant improvements in various areas of survivability, the bases will grow increasingly vulnerable to attack as Chinese short-range ballistic missiles (SRBMs) grow both more numerous and more sophisticated.¹⁴

If basing in Taiwan appears both politically and militarily imprudent, what about Japan? It seems likely that the Japanese would grant use of their bases to the United States for certain operations in defense of Taiwan provided that China could be clearly implicated as the aggressor (i.e., provided that Taipei had not done anything unreasonably provocative, such as declare independence). Limitations on the employment of forces from Japanese bases could, however, be strict. For example, Tokyo could well decide not to permit strikes on China itself to be launched from its territory. Nonetheless, our assessment is that there is a good chance Japan would permit its facilities to be used for missions against Chinese forces in international or Taiwanese airspace.

As Figure 4.4 shows, however, the current USAF base at Kadena is nearly 500 nm away from the Strait. As a result, F-15 or F-16 fighters operating from that base would probably need to maintain combat air patrol (CAP) orbits near Taiwan, since they could not launch and transit in response to warnings of a Chinese air attack headed for Taiwan. This is in contrast to, say, a carrier stationed 50 nm off Taiwan's east coast, whose aircraft would need to fly only about 175 nm to get to the centerline and could therefore be more responsive to incoming raids.¹⁵

¹⁴See the discussion of Taiwanese air base survivability in Shlapak et al. (2000).

¹⁵We have not performed detailed analysis on the difference that the F-22 would make were it operating from Kadena. However, simple mathematical calculations suggest that employing its supersonic "supercruise" capability might enable the F-22 to cover the distance from Okinawa to the centerline quickly enough to responsively engage an attacking Chinese force that was detected early. This assumes that the F-22 can transit, fight, and disengage to a safe distance without needing to refuel; presumably

Kadena may also suffer from limitations in its ability to support high-tempo operations by a large force of combat aircraft. The base currently hosts two squadrons totaling 48 F-15C fighters, a special operations group, an air refueling squadron, a reconnaissance squadron, an AWACS squadron, and a search-and-rescue squadron.¹⁶ In addition, it is an important transit point for airlift activity in the Western Pacific. Kadena is, in other words, a busy place even day to day, and it is not clear how many more aircraft could be operated out of the base under combat conditions.

Longer-range aircraft, such as surveillance platforms and heavy bombers, could operate out of Guam to support the defense of Taiwan. Assuming that the United States decides to intervene in a major Taiwan crisis, preliminary RAND analysis suggests that B-52s armed with Harpoon antiship missiles could play an important role in defeating Chinese maritime operations in the Taiwan Strait.¹⁷ Currently, however, there would appear to be few alternatives available to Japan for supporting efficient fighter operations in this area (although Korea might fill that role if sufficient tanker assets could be committed and securely bedded down; like those in Japan, U.S. bases in Korea are inside the range rings for many Chinese surface-to-surface weapons¹⁸).

Creative USAF-U.S. Navy joint operations may provide one near-term option. For example, carrier-based fighters could be used for air superiority and defense suppression while the USAF provides intelligence, surveillance, and reconnaissance (ISR), battle management, and support functions (e.g., tankers) using longer-range aircraft based at more distant bases. Such an arrangement would exploit the carriers' freedom of operation in international waters

the fighters could rendezvous with tankers on their way home. The Chinese could attempt to counter these tactics by using low-level flight profiles to minimize U.S. and Taiwanese detection time and/or by stationing their own barrier caps (BARCAPs) between Okinawa and Taiwan to intercept or divert U.S. fighters attempting to intervene.

¹⁶Information is taken from the Kadena Air Base public Web site (<http://www.kadena.af.mil/>).

¹⁷See Shlapak et al. (2000).

¹⁸Kunsan, for example, is about 350 nm from possible surface-to-surface missile (SSM) launch areas in the "camel's nose" part of Shandong Province. Okinawa is nearly 100 nm farther from the nearest PRC territory.

while perhaps facilitating access to foreign bases, since they would be used for support rather than combat aircraft. Heavy bombers could operate from U.S. territory on Guam.

In the longer term, the USAF should strive to develop a more robust posture to support Taiwan should the necessity arise. One step could be to expand cooperation with the Philippines. Whereas Manila is approximately 650 nm from the centerline of the Taiwan Strait, a base in northern Luzon would be about 450 nm away (i.e., a little closer to the Taiwan Strait than is Kadena). Even more proximate is Batan Island, which is on the order of 300 nm from the likely area of operations. Although it is unlikely that the United States desires or could obtain permanent basing in the Philippines, recent improvements in relations between Washington and Manila could lead to increased access. The USAF's goal might be to develop, in the mid to long term, arrangements with the Philippines not dissimilar to those enjoyed with Singapore today. Such a relationship would not involve permanent American presence but would permit frequent rotational deployments that would allow for infrastructure improvements and keep facilities "warm" to enable the rapid start of operations in a crisis.¹⁹

In the north, the United States may also have options to better exploit its close security relationship with Japan. Should the U.S. Marine Corps force on Okinawa be reduced or even eliminated, the United States should investigate the possibility of establishing the current Marine Corps air station at Futenma as a collocated operating base (COB) for USAF fighters. Kept in a caretaker status during peacetime, the base would be prepared to accept a rapid influx of combat and support aircraft in a crisis. An auxiliary Marine Corps airfield on Ie Jima could also be used, and the USAF may be able to deploy some assets to the Japan air self-defense force base at Naha.²⁰

¹⁹This strategy would be facilitated by setting up Guam as a well-stocked forward support location (FSL) for USAF power projection throughout the Western Pacific and East Asia. The benefits of FSLs are described briefly in Shlapak et al. (2000) and are laid out more fully in R. S. Tripp, Lionel Galway, Timothy L. Ramey, Mahyar Amouzegar, and Eric Peltz, *Supporting Expeditionary Aerospace Forces: A Concept for Evolving to the Agile Combat Support/Mobility System of the Future*, Santa Monica: RAND, MR-1179-AF, 2000.

²⁰Presumably the Ie Jima facility would need to be made capable of supporting the logistics demands of a combat force.

Okinawa itself lies only about halfway down the Ryukyu Island chain. Further southwest—and hence considerably closer to Taiwan—are a number of islands. Figure 4.5 shows the locations of a number of existing airfields in these islands, and Table 4.2 displays some of their more salient characteristics.²¹ Shimojishima, for example, is less than 250 nm from Taipei and has a commercial airport with a 10,000-foot runway; the island also features a sizable port that serves as a base for Japanese patrol boats. Basing on one or more of the southern Ryukyus would clearly be advantageous for the defense of Taiwan; however, it is unclear how much investment would be needed to create adequate facilities (by extending runways, installing munitions storage facilities, and so on).

Whether an expanded or at least southward-shifted USAF base posture in Japan would be feasible from Tokyo's point of view remains to be evaluated. U.S. basing has long been a contentious issue within the Japanese body politic, and any attempt to create new bases—or even COBs—would almost certainly provoke controversy. This might be especially true of requests to use airfields in the Southern Ryukyus, which the Okinawa prefecture wishes to promote as ecologically friendly vacation destinations.

One way to overcome resistance to an initiative to permit U.S. access to the Southern Ryukyus might be either explicitly or implicitly to offer the Japanese government in general—and the Okinawan people in particular—a quid pro quo arrangement. The removal or reduction of U.S. forces elsewhere in the islands, such as the withdrawal of the Marines from Okinawa, could be the currency with which Washington might pay for a foothold in the critical area surrounding the troubled waters of the Taiwan Strait.

²¹To be suitable for combat operations, a runway should be at least an aircraft "critical field length." This is the distance an aircraft requires to accelerate to takeoff speed, suffer a serious malfunction, and either stop or get into the air before going off the end of the runway. For an F-15C fully loaded for air-to-air operations and carrying three 600-gallon external fuel tanks, critical field length is between 7000 and 8000 feet, depending on environmental conditions. Thanks to our colleague John Stillion for this information.

Southeast Asia

As discussed in Appendix C, the bulk of the likely scenarios in Southeast Asia concern humanitarian relief, internal instability (as in Indonesia), or international hostilities at a fairly low level of violence (e.g., a Chinese move against the Spratly Islands). In all these cases, the demand for USAF assets and activity would be low, as there does not appear to be a contingency requiring large-scale force application on the planning horizon in this region.

One could envisage a U.S. military mission to help defend the SLOCs in the South China Sea either against one of the Spratlys claimants or, more likely, against pirates (perhaps operating with the tacit support of one of the claimants). Such a mission might resemble that undertaken in 1987–1988 to provide security for the Persian Gulf SLOCs that had come under attack from Iran during the Iraq-Iran war. Alternatively, the U.S. military could be asked to show support for Philippine forces that had come under attack in the South China Sea. Again, this would likely consist primarily of a “presence” mission, albeit one that was undertaken under circumstances in which there was some probability that hostile actions would be taken against the deployed U.S. forces.

Another potential mission for the U.S. military would be humanitarian intervention in Indonesia. As the East Timor crisis demonstrated, unrest in Indonesia can create levels of international concern sufficient to lead to humanitarian intervention. Australia in particular is likely to be very concerned about any unrest in Indonesia that threatened to create a major refugee crisis or that otherwise had the potential to directly affect Indonesia’s neighbors. Thus, the U.S. armed forces could be tasked to participate—most likely in conjunction with Australian, other foreign, and perhaps U.N. forces—in a peacekeeping or “peace enforcement” role. In addition, it may be necessary to assist in the evacuation of noncombatants from areas suffering from violence.

These scenarios pose potential problems for the USAF. As in the case with Taiwan, the USAF’s current posture in the Western Pacific is less than ideal with regard to projecting power into Southeast Asia. As Figure 4.6 shows, the U.S. base on Guam is almost 3000 nm from

activities and similar ones that might be undertaken with or come to include other countries (such as the Philippines and Indonesia, and, in the future, perhaps Vietnam as well) could form the basis of an expanded expeditionary presence in the region on an ad hoc or rotational basis. Since many of the local air forces are engaged in ambitious modernization programs, they are likely to welcome expanded contact with and opportunities to learn from the USAF.

The Philippines may present an especially interesting opportunity to enhance USAF access in the Western Pacific. After reaching their nadir in the mid-1990s, relations between Washington and Manila have recently improved, culminating in the signing of a status-of-forces agreement in 1999. While neither side has expressed any interest in resuming permanent basing of U.S. forces in the islands, the Philippines' key location in the South China Sea could make it an attractive site for future USAF expeditionary deployments.

The United States has a long-standing treaty relationship with Thailand and use of a Royal Thai naval air station at U Taphao. The United States also has an access arrangement with Singapore that offers the USAF a foothold in the heart of Southeast Asia. Looking again at Figure 4.6, it is less than 500 nm from Jakarta and only about 1000 nm from Rangoon. While limited by lack of space, which would impede its ability to support large-scale high-tempo flight operations, Singapore represents an important asset for the Air Force in this region. Guam would play a key role as a staging base and operating location for strategic airlift, ISR platforms, tankers, and bombers, and Singapore could host a small group of fighters as well as C-130s and other mobility assets.

The political dynamics of the region are sufficiently complex that countries willing to support the United States under one set of circumstances could well withhold their assistance under others. Thus, while Singapore is a valuable point of entry into Southeast Asia, the USAF would benefit from diversifying its portfolio of access alternatives there. The United States enjoys good security ties with a number of governments in Southeast Asia, including Australia, the Philippines, and Thailand. Accordingly, expanding or developing access agreements with some of these countries would make for a more robust set of options for the USAF. In the longer term, improving security cooperation between the United States and Malaysia, Indone-

U.S. policy toward South Asia was disrupted by the Indian and Pakistani nuclear tests in 1998. After two years, however, it appears to be undergoing a gradual process of improvement. Washington seems to be coming to accept that neither India nor Pakistan is likely to divest its nuclear option regardless of Western pressures; nonetheless, U.S. policymakers hope to cap the competition at some low level and encourage the evolution of a stable equilibrium between the two sides.

In contacts with the Pakistani militaries, emphasis should be placed not just on technical exchanges on topics such as tactics, doctrine, and airmanship but also on professionalism and the proper role of the armed forces in a democratic, modern society. The military coup in Pakistan was the first ever in a nuclear-armed state; it was not an event that we should aspire to see repeated.

Technically, the USAF may be called upon to participate in efforts to help one or both sides develop and deploy robust security and C² procedures and systems. Positive control of all nuclear weapons on both sides as well as reliable connectivity to survivable delivery systems can help both minimize the likelihood of inadvertent nuclear use and limit the “use-or-lose” pressures that Indian or Pakistani leaders could confront in a crisis.

In terms of possible scenarios for U.S. military involvement in South Asia, one would seem the most daunting: a large-scale military confrontation between India and Pakistan would cross the nuclear threshold, resulting in enormous civilian casualties in both countries. Under such dire circumstances, the suffering of perhaps tens of millions of civilians could demand a massive and immediate humanitarian assistance effort regardless of whether hostilities had completely terminated. The U.S. military would almost certainly find itself on the leading edge of any such undertaking—a venture that would combine all the stresses of a continental-scale peace enforcement and relief operation with many of the risks of major theater warfare. Given basing and access difficulties, such a task could present Herculean challenges to planners and operators alike.

A second mission in South Asia could be enhanced surveillance. A severe crisis between India and Pakistan or the outbreak of war between them would create high levels of concern with respect to the

safety of the two nations' nuclear arsenals and the possibility of their use in the conflict. In this case, it might be desirable to increase reconnaissance activities by sending additional surveillance assets to the area. The U.S. military might be tasked to provide these assets as well as to operate them either from international waters and airspace or over the territory of the combatants—either with or, in an extreme situation, without permission to do so.

USAF basing to support the types of activities discussed above is somewhat limited in this part of the world. Diego Garcia is the permanent U.S. outpost nearest the subcontinent, but we use the term “near” advisedly—for that base lies approximately 2500 nm from Islamabad²⁴ and 2200 nm from New Delhi.²⁵ Bangkok is some 1600 nm from the Indian capital and 2000 nm from Islamabad, as are bases in central Saudi Arabia, while Singapore is about 2200 nm and 2600 nm away.

The list of countries that may provide bases for USAF aircraft is scenario-dependent and closely tied to the type of operations conducted. Humanitarian operations will likely yield the longest list of countries that would be willing to support the USAF, while other types of operations would likely yield fewer basing possibilities. The following discussion identifies basing opportunities that could be expected to arise over a wide range of scenarios and operations.

Referring to the map in Figure 4.8, we have identified three major regions to evaluate.

We see limited opportunities east of India in the area of Burma and Bangladesh. First, this is quite far from the Indian-Pakistani border, where we envision the most plausible scenarios taking place. In

²⁴The base is approximately the same distance from Kashmir, the ever-simmering focal point of Indo-Pakistani tensions.

²⁵Incirlik, a quasi-permanent USAF base in Turkey, is considerably closer to both Pakistan and northwestern India. However, aircraft would have to transit nearly 900 nm of Iranian airspace to get there, an unlikely course for any U.S. aircraft. By diverting northward over the former Soviet republics of Central Asia, U.S. jets flying from Turkey could avoid Iran; however, reaching Pakistan would then involve traversing at least the easternmost “finger” of Afghanistan or parts of western China. Getting to India would involve overflying China or Pakistan. The distances saved would still add up to several hundred miles, but the political difficulties involved would under most circumstances be all but overwhelming.

Seeb and Masirah offer very good facilities to support large-scale air operations. The runway at Seeb is more than 11,750 feet long and 148 feet wide, and nearly 5 million ft² of ramp space is available for the conduct of virtually any type of USAF operation. In addition, a parallel taxiway is available that could be used as an emergency runway if required. Masirah is also a good facility offering two runways, both 148 feet wide; one is more than 10,000 feet long, while the second is nearly 8500 feet long. Both runways have a parallel taxiway, and the airfield has over 800,000 ft² of ramp space.

As always, however, access to these excellent facilities will likely be strongly dependent on the political circumstances surrounding the contingency in question. Pakistan's attitude toward any proposed U.S. action could prove critical in determining the ease with which the USAF secures facilities in Oman.

Finally, there is the critical issue of demarcation. It is at the Indo-Pakistani border that the United States Unified Command Plan (UCP) draws the dividing line between U.S. Central Command (USCENTCOM), which holds responsibility for much of the greater Middle East, and U.S. Pacific Command (USPACOM), which has the brief for Asia. Although this may appear to be an arbitrary and inappropriate division of labor, any geographically based command structure will almost certainly feature one or more such seams. There are, moreover, valid historic reasons for this particular arrangement. Pakistan was, for example, a member of the long-defunct Central Treaty Organization (CENTO) along with Iran and other Middle Eastern countries. In addition, Pakistan's national self-consciousness ties it more to its Muslim neighbors to the west than to the Hindu and Buddhist societies of Asia.

At the same time, however, the tensions between India and Pakistan represent one of the clearest and most dangerous threats to peace in the world today, and there is little reason to believe that this will change significantly in the near term. Given the abiding U.S. interest in maintaining stability between these two nuclear powers, American policy must be well integrated and highly coordinated. Having the U.S. officers responsible for India and Pakistan reporting to different commanders through different chains of command is certainly not helpful in achieving this goal. Thus, both USCENTCOM and USPACOM must be highly sensitive to the potential dangers inherent in

this awkward division of labor and must work hard to overcome those dangers. One approach might be to establish a standing coordination committee, perhaps chaired by the deputy commanders-in-chief (DCINCs) of USCENTCOM and USPACOM. Meeting regularly in Honolulu or Tampa and communicating electronically on a daily basis, this group could help ensure that U.S. policy goals and guidance were being interpreted and applied consistently and that military-to-military contacts with both India and Pakistan were being handled in the context of a common framework of objectives and processes.

The next revision of the UCP, however, should consider including Pakistan within the USPACOM boundary; such a reorganization would place both India and Pakistan within the ambit of a single U.S. military command while allowing USCENTCOM to focus its energies and resources entirely on the high-priority challenges associated with Gulf security. Alternatively, a new mechanism might be developed for dealing with countries that, like Pakistan, can logically be placed in one AoR for some purposes and in another AoR for others.

MISSILE DEFENSE

In the long run, the proliferation of ballistic missiles in Asia will pose an increasing threat to U.S. power projection capabilities, U.S. allies, and potentially the U.S. mainland. At present, both China and North Korea field missile forces that are likely to grow in both number and sophistication over time. As part of its strategy for Asia, the United States must therefore address this evolving threat. What is needed is a broad and flexible missile defense capability that takes technical, political, and diplomatic issues into account.

One possible way to deal with the threat to U.S. allies and U.S. forces and assets in the region would involve a theater missile defense (TMD) capability. Assuming that the adversary's missiles had only conventional (or perhaps even chemical) warheads, this TMD capability would not have to be "leakproof"; simply reducing substantially the number of missiles penetrating to their targets would provide an important benefit. On the other hand, if the adversary were willing to escalate to the use of nuclear weapons, the value of a "leaky" defense would be considerably reduced.

The issue of a national missile defense (NMD) for the United States has gained great salience in Washington. At present, the only country in Asia aside from Russia that could threaten the continental U.S. is China, although North Korea is reported to be attempting to develop at least a primitive intercontinental ballistic missile (ICBM) capability. And, not surprisingly, the Chinese have vociferously objected to the notion of missile defense, especially NMD.²⁷

Given the small size of China's ICBM force, Beijing has reason to believe that even a "thin" U.S. missile shield would deprive them of their ability to threaten the continental United States and reduce their leverage on the United States in a variety of crises and confrontations. The most obvious Chinese response would be to increase the size of its ICBM force so as to be able to overwhelm American defenses. In addition, the Chinese would presumably attempt to develop various decoys and other penetration aids that would enable them to defeat the U.S. defenses.

As it decides whether to go forward with NMD, the United States should and is likely to consider the impact on Sino-American relations. Several factors will have to inform U.S. calculations. First, should the United States accept that it will remain vulnerable to Chinese missiles even if it could develop the capability to protect itself against them? With regard to the former Soviet Union, the U.S. acceptance of mutual assured destruction was based on the recognition that it was technologically impossible to acquire adequate defenses.

Second, will the United States be militarily worse off given plausible Chinese military responses to a U.S. NMD deployment? If China responds by building up its own ICBM capabilities so as to overwhelm or otherwise defeat the defenses, the United States would remain as vulnerable to a Chinese strategic strike as it is today. This would mean no net change. It is also possible that the United States would become more vulnerable—i.e., that the Chinese would decide to build a strategic nuclear force that would be capable, even in the presence of U.S. defenses, of inflicting more damage on the United States than their current force can. On the other hand, it is not im-

²⁷With respect to TMD, the Chinese have thus far concentrated their fire on the possibility that a U.S. system could be designed or deployed so as to defend Taiwan.

possible that the Chinese, mindful of America's greater financial and technological capabilities, might decline to enter such an "offense-defense" race.²⁸ Would such a race force China to decrease investment in weapon systems that would be more useful in threatening U.S. regional interests?

Third, what would be the political impact of NMD deployment on China's evolution? It could be argued that such action would place China on a hostile trajectory and undermine prospects for the emergence of a more cooperative and democratic China. Alternatively, it might be argued that NMD deployment would have no effect on China's political evolution, which will be determined primarily by internal factors in any case; indeed, deployment of missile defenses might undercut the apparent Chinese belief that China's ability and willingness to absorb large numbers of casualties in pursuit of its goals gives it great leverage against the United States.

Fourth, what would be the effect of a possible Chinese missile buildup on countries like Russia and India? Such activity could induce India to build up its own nuclear and missile capabilities (unless it could be convinced that the Chinese buildup of intercontinental capability was irrelevant to its own security concerns) and cause Russia to be reluctant to further reduce its own offensive forces. This could have some generally negative effects with respect to armament levels and nonproliferation but could also cause these countries to be more willing to cooperate with the United States. Indeed, the possible reactions of its neighbors could moderate any Chinese strategic nuclear buildup undertaken in response to U.S. NMD.

²⁸During the ABM debate of the late 1960s, it was often argued that missile defense was not cost-effective in the sense that \$1 million spent on defense could be effectively countered by a much smaller amount spent on offense. Thus, the side that invested heavily in defense would find that, after its opponent had spent a much smaller sum, it was essentially back where it started from. This argument assumed that the two sides had roughly equal financial resources. In the case of a country whose financial means are much less than those of the United States, however, this argument would not necessarily work. It might turn out that, in the long run, the United States was better able to spend a larger sum on defense than the corresponding smaller sum that its adversary would have to spend on offense.

BOLSTERING OVERALL U.S. POSTURE IN ASIA

Bolstering the overall U.S. posture in Asia will require knitting together a coherent web of security arrangements among the United States and its core partners in Asia—Japan, Australia, and South Korea—that might expand to Southeast Asia as well. This will demand military as well as political steps. Training exercises will need to be expanded to include all the parties; planning forums will need to be established; and some degree of hardware standardization will be necessary to foster human and technical interoperability.²⁹

The overall U.S. posture in the Western Pacific would benefit from three additional steps. First, Guam—a sovereign U.S. territory—should be built up as a major hub for power projection throughout Asia. Sufficient stockpiles of munitions, spare parts, and other equipment should be established to support the rapid deployment and employment of a sizable tranche of USAF assets—say, 100 to 150 fighters and up to 50 bombers—anywhere in the region. Within C-130 range of the Philippines, northwest Australia, Malaysia, Indonesia, Singapore, Vietnam, and Thailand, assets could be quickly moved from Guam to FOLS across much of the region.

Second, the USAF and the U.S. Navy should work to develop new concepts of operations that maximize the leverage their combined forces could offer to a joint commander in a future Pacific crisis. With basing for land-based fighters at a premium in much of the region, the USAF and the U.S. Navy should, for example, plan and practice tactics and procedures to enable carrier-based fighters to provide air-to-air and defense-suppression support for Air Force bombers and in turn to be supported by USAF tankers and command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) platforms.

Third, the USAF should review its future force structure and consider whether it might not benefit from a mix that places greater emphasis on longer-range combat platforms. In this context, acquiring additional heavy bombers might be one option. Another option that is often discussed is the arsenal plane, an aircraft capable of delivering

²⁹These steps could provide the political benefit of helping dispel the lingering distrust and animosity between South Korea and Japan.

a large number of smart munitions from a stand-off range beyond the enemy's defensive envelope. A third option would be to develop and deploy a small fleet of high-speed, long-range strike aircraft.³⁰ Asia is vast, and options for basing large numbers of land-based combat aircraft are few and far between; long range and high speeds have payoffs that might not be evident when looking at contingencies in more compact theaters, such as Korea, Europe, or even the Persian Gulf.

THE LONG TERM

Although any vision of the future by definition grows ever cloudier the further one gazes, three general recommendations can be made to help the United States shape the future Asian security environment in a way that might help avoid the most severe disruptions of regional peace. The first is that the United States should strive to maintain open lines of communication both with and among its Asian partners. The United States should be willing to talk with all parties in the region, even those with which it has a clash of interests, if only to make clear the specific nature and extent of its disagreements. This includes military-to-military contacts, which could help provide vital domesticating influences on powerful security forces in emerging democracies such as Indonesia.

Second, the United States should practice, advocate, and foster increased political-military transparency in Asia. While "calculated" or "strategic" ambiguity may have its place, the United States should make clear its fundamental objectives in the region: that border disputes not be settled by violence, that the China-Taiwan question not be resolved by force, and that democratic and market-oriented governments take deep and secure root. In so doing, the United States

³⁰By "high speed" we mean roughly Mach-2 supercruise and by "long range" a minimum 2500-nm unrefueled range. If fitted with a dozen or so 250-pound small smart bombs (SSBs), such an aircraft could conduct missions currently executable only by B-1 or B-2 bombers at a sortie rate more comparable to that achieved by current fighter-bombers such as the F-15E or F-117. Preliminary calculations suggest that such a platform would be about the size of an F-4. See John Stillion and David T. Orletsky, *Airbase Vulnerability to Conventional Cruise-Missile and Ballistic-Missile Attacks: Technology, Scenarios, and U.S. Air Force Responses*, Santa Monica, RAND: MR-1216-AF, forthcoming.

can attempt to elicit a similar degree of frankness from Asia's major indigenous powers, even if the main result is to bring to light and clarify those places where disagreements exist.

Finally, hedging against the possibility that all may not turn out for the best in Asia implies that the United States should cast its net broadly in its search for security partners. Not all relationships need to achieve the degree of intimacy that characterizes the U.S.-Japan alliance; contingent access agreements, training rotations, increased foreign access to U.S. professional military education, and other lower-level interactions all offer opportunities for improved bilateral and multilateral relations.

