The PRC’s surface-to-surface missile forces would be a major factor in an invasion scenario, such as the one we assess in the main body of this report. China’s missiles would also be at the heart of many other coercive strategies aimed at Taiwan, ranging from the kinds of exercises held in 1995 and 1996 to actual employment against military, political, and economic targets in an attempt to use limited force to compel Taiwanese concessions. Indeed, it is widely believed that missile attack represents the greatest strategic threat currently confronted by Taiwan.1

There are at least four reasons why Taiwan should be deeply concerned about the missile threat. First, effective defenses are not likely to be available much before 2010. Current and near-term systems, such as the Patriot PAC-2 and PAC-3 and the U.S.-Israeli Arrow, are designed to intercept Scud-like missiles and may have only limited capability against the more advanced weapons entering the Chinese

1It is important to keep this threat in context. The largest number of missiles we employed in any of our scenarios was 620. According to open-source estimates of their payloads, their total “throw weight” would be about 450 tons of high explosives. To put this in perspective, the average operational bomb load of a World War II B-17 was about two tons. By 1945, the U.S. Eighth Air Force was routinely dispatching formations of 600 to 1,000 Flying Fortresses to attack individual industrial complexes in Germany. By the yardstick, the 600-plus Chinese missiles we aim at Taiwan could deliver about one-quarter the explosive power of a single “thousand-plane raid” on the Third Reich. While this is a nontrivial amount of destructive power, it is far from clear that it would be in fact sufficient to materially devastate Taiwan’s military, economy, or society. The potential psychological impact of such attacks, of course, should not be underestimated.
inventory. And, all these systems are dependent on cumbersome surveillance radars that are highly vulnerable to attack (by SOF, for example) and difficult and expensive to replace.

Second, the threats will continue to grow in number and improve in quality. According to one estimate, China has the “industrial capacity” to produce up to 1,000 new missiles over the next eight to 10 years, and some reports suggest that up to 650 of them could be aimed at Taiwan (U.S. Department of Defense, 1997, p. 4; Gertz, 1999, p. A12). A recent Department of Defense report concluded:

By 2005, the PLA likely will have deployed two types of SRBMs and a first-generation LACM [land-attack cruise missile]. An expanded arsenal of accurate conventional SRBMs and LACMs targeted against critical facilities, such as key airfields and C²I nodes, will complicate Taiwan’s ability to conduct military operations. (U.S. Secretary of Defense, 1999, p. 5.)

Third, international response to limited missile attacks might be less drastic and widespread than that which would be called forth by an outright invasion. China could try to moderate global opprobrium by directing its attacks primarily at military targets, weakening Taiwan’s self-defense capabilities in the process.

Finally, the psychological impacts of missile attacks are unpredictable. There are, however, precedents for dramatic impacts. In 1944, Allied operations in Europe were greatly affected by British fears regarding the potential public reaction to German V-2 rocket attacks. Even with the war essentially won, the Churchill government worried that popular support could be threatened if the attacks were not stopped or at least reduced in intensity. So, air and land campaigns in the European theater were redirected so as to more quickly overrun or destroy known V-2 launch areas and production facilities.

More recently, the “war of the cities” between Iran and Iraq marked the terminal phase of their drawn-out and bloody war. Despite what was essentially a stalemate on the ground, Tehran was induced to accept Iraqi terms for a cease-fire at least in part because of the effect that Scud attacks were having on Iran’s urban populations. Already worn out by almost a decade of war, many Iranians simply could not bear the persistent terror attacks.
A problem of this magnitude demands a multipronged response. We wish to propose two elements of such a strategy.

First, Taiwan could obviously consider acquiring effective theater missile defense (TMD) systems as they become available. Indeed, even systems that might only be modestly effective, such as PAC-3, could be useful in two ways. By thinning out Chinese strikes, they would reduce the damage absorbed by Taiwan, and—as demonstrated so powerfully in Israel during the Gulf War—they provide a significant psychological boost to the people under attack.

However, TMD is not a panacea. Any defense that relies on unhardened fixed installations, such as radars, risks being disabled by enemy action. Further, all proposed TMD architectures can be overwhelmed by a sufficiently large barrage of missiles. China has in fact threatened to respond to any deployment of TMD in Asia by greatly increasing the size of its short-range missile forces.

As a second element in our strategy, then, we return to a theme we sounded earlier: Taiwan should invest in making important military targets largely invulnerable to missile attacks. This can be done through hardening, mobility, and redundancy. Concrete and construction labor are relatively cheap compared with TMD systems or F-16s. Burying fuel storage at air bases, relying on underground pipelines instead of tanker trucks to deliver fuel to hardened shelters, acquiring mobile air-defense surveillance radars, and creating multiple, mutually supporting data links and C² networks are all highly effective antimissile defenses. Also, by making the ROC military passively self-protecting, this approach would allow such active TMD systems as can be fielded to be concentrated around key economic, political, and cultural targets that cannot be buried under reinforced concrete or moved around the countryside.

The psychological effects of a rain of Chinese missiles on Taiwan could be devastating if the Taiwanese people feel unprepared and unprotected. By preparing itself to absorb attacks without large-scale

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2The same holds true for such large, vulnerable air platforms as the Boeing 747 that will carry the USAF’s airborne laser. And, as we pointed out in Chapter Three, ship-based TMD systems would immediately go to the top of the target list for the Chinese Navy (especially the PLAN’s submarines).
losses of capability, the ROC military can help mitigate this impact. In the near term, the main role for the Taiwanese armed forces in antimissile operations will be to sustain their ability to defend the island against invasion and occupation. Maintaining a robust overall defensive posture will reassure both the Taiwanese population and the world community at large that the ROC retains both the ability and the will to protect itself.3

The United States would almost certainly be a critical partner in any Taiwanese effort to develop or procure TMD capabilities. This area is fraught with difficult political questions; the PRC has clearly stated its opposition to Taiwan’s inclusion in any U.S.-sponsored missile-defense regime in East Asia. Whether or not Taipei is ultimately successful in fielding active TMD, the United States can assist Taiwan in responding to the missile threat in at least two other ways.

First, the United States could make clear that it would view any use of military force against Taiwan, however limited, as a grave step that would have immediate and serious consequences in Sino-U.S. relations. This is not the same thing as making an open commitment to the defense of Taiwan. It is instead simply avoiding the mistake that arguably was made before both the Korean War and the Gulf War: that of signaling to the aggressor that the United States would likely stand aside from any military confrontation. While “strategic ambiguity” may have its advantages as a declaratory policy, no one in Beijing should suffer any illusions that relations with Washington would be unaffected if it unleashed the PLA against Taiwan.

Second, at the risk of being repetitive, the United States can encourage and materially support an immediate and intensive Taiwanese program of passive protection against air and missile attack. This program should focus on military targets, but might also be extended to political and economic facilities that could benefit from cost-effective forms of hardening and increased security.

3Militarily, Taiwan might be inclined to develop offensive weapons that could enable a “tit-for-tat” response to any PRC attacks. However, the vast difference in size between the two countries suggests that this would be an ineffective response, and the likely political fallout may make it an inadvisable one. Jeopardizing U.S. support to field a token missile force would simply be a bad, bad bargain for Taipei.