



## SPEECHES AND TESTIMONY

**Robert D. Walpole,  
National Intelligence Officer for Strategic and Nuclear Programs**

**North Korea's Taepo Dong Launch and  
Some Implications on the Ballistic Missile Threat to the United States**

**Center for Strategic and International Studies**

**8 December 1998**

Good morning. I welcome the opportunity to be here today to talk about the recent North Korean Taepo Dong launch, and more broadly the ballistic missile threat to the United States. Assessing and defining the threat to our homeland and to our interests worldwide is one of the most important intelligence missions in the post-Cold War world. At the outset, I want to underscore that the Intelligence Community considers foreign assistance to be fundamental to that threat, not merely an incidental aspect of the problem. The threat is real, serious, and growing. In fact, Congress has mandated that we provide annual Community reports on the threat. But the threat is also dynamic. Since our March 1998 annual report to Congress on foreign missile developments, the Pakistani Ghauri, Iranian Shahab 3, and North Korean Taepo Dong 1 missiles/launch vehicles have all been tested. In light of the latter, we published a classified update memorandum in October on the North Korean Taepo Dong missiles and some potential implications for the future.

**Taepo Dong 1 Launch.** Let me begin with the August 31 Taepo Dong-1 satellite launch attempt. While the system's third stage failed, the launch confirmed Intelligence Community concerns the past several years regarding North Korea's efforts to acquire an ICBM capability; the launch also demonstrated some unanticipated developments.

We have been following North Korea's ICBM progress since the early 1990s, most notably, its efforts to develop what we called the Taepo Dong 1 medium-range missile and the Taepo Dong 2 ICBM, both of which we had assessed were two-stage missiles. The fact that we have been following these efforts for many years is significant:

- First, it indicates that North Korea has taken about ten years since it made the decision to acquire an ICBM capability to conduct a flight test, and deployment has not yet begun. Projections of missile development and deployment need to be country- and program-specific; we cannot follow a single template for the world.
- Second, it means that we have been reporting on and making projections about these developments for years. In some cases, our projections overestimated North Korean capabilities; for example, some projected that the Taepo Dong-2 would have flown by now. In any event, our reports over the years relate to questions about current and future Intelligence Community abilities to warn about ICBM programs and developments.

The August launch used what we had called the Taepo Dong-1 medium-range missile, but it had an unanticipated third stage. Although the North Koreans failed to place their satellite into orbit, they tested some important aspects of ICBM development and flight, such as multiple stage separation, roughly on the timetable we expected, but using a vehicle configuration we had not anticipated.

The existence of the third stage concerns us. First, we had not included it in our earlier projections; neither had outside experts looking at our intelligence. Second, it and potentially

larger third stages have significant implications for the Taepo Dong-2. Third, it raises many proliferation concerns. We are continuing to conduct more analysis on it, trying to identify more about it, including its capabilities and why it failed.

Our update memorandum assesses the North Korean capabilities demonstrated by this launch and the threat implications of the Taepo Dong missiles. The memorandum notes, for example, that the first and second stages performed to North Korean expectations, providing what amounts to a successful flight test of a two-stage Taepo Dong 1 medium-range missile. With an ability to deliver several hundred-kilogram payloads about two thousand kilometers, the system poses a threat to US allies and interests in the region.

We also assess that after the North Koreans resolve some important technical issues, including assessing why the third stage failed, they would be able to use the three-stage configuration as a ballistic missile, albeit with great inaccuracy, to deliver small payloads to ICBM ranges; that is, ranges in excess of 5,500 km—the smaller the payload, the longer the range.

Taking note of that relationship between payloads and ranges, the update looks at the implications of lighter payloads for the Taepo Dong-2, which we had assessed in the mid-1990s could deliver larger payloads—several hundred to a thousand kilograms—4,000 to 6,000 kilometers. At the upper end of that range, the Taepo Dong-2 could reach mainland Alaska and the Hawaiian Islands with these heavy payloads. Simple physics tells us the lighter payloads could go further. The update memorandum also looks at the implications of the third stage on the Taepo Dong-2; with the stage demonstrated in August, the Taepo Dong-2, again with significant inaccuracy, could probably reach the rest of the United States, depending on the size of its payload.

We also discussed proliferation and transfer implications of the missiles to countries such as Pakistan, Iran, and Iraq (if unrestrained). Finally, the update discusses our assessments of these countries' biological, chemical, and nuclear weapons programs.

We have learned that we need to be much more explicit in our warnings about missile developments—not just indicating that a country has an ICBM program, that it could flight test and deploy an ICBM in given years, all of which are important messages. We also need to include clearer language and more details about how we might and might not be able to warn about other specific milestones in an ICBM development effort, judgments that will likely vary by country. We have determined that concepts like “deployment” vary by country; in some cases, for example, deployment may not require dedicated, long-term missile basing facilities.

The Taepo Dong launch demonstrated—in a way that words alone cannot—only one of the emerging threats facing the US interests. Our March 1998 annual report was prepared as our first response to a request by Congress for a yearly update of that threat assessment. Under the DCI's direction, the 1998 report responded to criticisms levied at a 1995 National Intelligence Estimate. It also incorporated the recommendations of outside experts who reviewed the 1995 estimate. As a result, the 1998 report addresses concerns regarding how we discuss foreign assistance, alternatives to increasing a missile's range, and approaches to circumvent development. Work is already underway on the 1999 report, and we are looking differently at how we characterize uncertainties, alternative scenarios, and warnings as a result of our interaction with outside experts since the March report was published. With the continued involvement of outside experts, I expect successive reports to be better, addressing additional questions as they are asked.

**Our 1998 Report.** This morning I would also like to outline the March 1998 report; discuss areas where the substantive conclusions might agree or disagree with those of other experts; and discuss what we are doing differently for our 1999 report. While I wish you all could read our March 1998 report, which gives a full appreciation for our views and concerns about this growing threat, it remains classified, and therefore cannot be released to the public. But, I can give you a feel for what the report says.

Let me first make four points on our methodology.

- One: we do not expect countries to follow any specific pattern for ICBM development. In fact, the United States, the former Soviet Union, and China all took different approaches. We frequently caution ourselves against any mirror-imaging. Just because a country took a certain amount of time—long or short—to develop and deploy an ICBM does not mean another country will.
- Two: we recognize that foreign countries can hide many activities from us. These countries are generally increasing their security measures and are learning from each other and from

open reporting of our capabilities. Hence, while I am able to share somewhat with you today, I will not go beyond limits that will help them hide even more from us.

- Three: with limited data, we are forced somewhat to use input and output methodologies to evaluate the threat. In addition, the Intelligence Community must attach likelihood judgments to its projections; thus, we project scenarios we judge to be most likely and include other scenarios with likelihood judgments attached. Let me repeat, we agree with others that many scenarios are possible, with varying degrees of likelihood. Indeed, we have looked at many of these rapid-development scenarios, including outright sales, which could get a country from a decision to “deployment” in a matter of months, weeks, or even days, depending on one’s scenario.
- Four: we do not consider the ‘absence of evidence’ to be ‘the evidence of absence.’ Quite the contrary, intelligence analysts routinely face gaps and make analytical judgments to project plausible scenarios. Working with limited evidence and making judgments is central to our job, as long as we underscore when we have little or no evidence. Analysts did so in the case of the critical threats some of the missiles pose. We also have noted that successful missile tests would give countries an emergency launch capability with any missiles in their inventory, even without evidence of deployment.

In the report, we underscore the significant role foreign assistance has played and continues to play—indeed throughout the report are several major discussions of technology transfer. For example, the report begins with several pages discussing the extent of foreign assistance from numerous suppliers to even more recipients. It also notes how foreign assistance has helped specific missile programs, such as assistance with Iran’s Shahab 3 missile. The report underlines the immediate threat posed by medium-range missiles, our continuing concern about existing and emerging ICBMs, and the increasing danger that comes from the proliferation activities of countries that possess or are developing such systems. We and the Rumsfeld Commission—using the available evidence, group debate, and outside expert review—came to some different conclusions about some of the timelines for ICBM development. Nevertheless, where evidence is limited and the stakes are high, we all need to keep challenging our assumptions—a role we will perform on this issue at least annually.

I’ll now summarize the body of the report, which focuses on the threat through 2010:

Theater-range missiles already in hostile hands pose an immediate and increasing threat to US interests, military forces, and allies. More countries are acquiring ballistic missiles with ranges up to 1,000 km, and more importantly, with ranges between 1,000 km and 3,000 km. As Iran’s flight test of its Shahab 3 medium-range missile demonstrates, this is not hypothetical; it is a reality that has to be dealt with now. With a range of 1,300 km, the Shahab 3 significantly alters the military equation in the Middle East by giving Tehran the capability to strike targets in Israel, Saudi Arabia, and most of Turkey. The Pakistani Ghauri, also tested this year, allows targeting of Saudi Arabia, Kuwait, and the Gulf, in addition to increasing Pakistan’s coverage of India.

Foreign assistance is fundamental to the growing theater missile threat. As we describe in the 1998 report, for example, Iran received important foreign assistance in developing its Shahab 3. Moreover, countries are seeking the capability to build these missiles independently of foreign suppliers. The growth in the sharing of technology among the aspiring missile powers is also of concern.

While we project that Russia’s strategic forces will shrink, they continue to be modernized and will remain formidable. China has about 20 CSS-4 ICBMs, in addition to shorter-range missiles. Most of the CSS-4s are targeted against the United States, and modernization efforts will likely increase the number of Chinese warheads aimed at the United States. Our report further noted that we judge that an unauthorized or accidental launch of a Russian or Chinese strategic missile is highly unlikely, as long as current security procedures and systems are in place. Russia employs an extensive array of technical and procedural safeguards and China keeps its missiles unfueled and without warheads mated.

Among those countries seeking longer-range missiles, the report noted that North Korea is the most advanced, a judgment underscored by the recent launch. The report noted that North Korea could flight test the Taepo Dong-2 missile this year (with only a few weeks left of the year, this is likely another overestimation on our part) and that it could be deployed in a few years. Beyond the North Korean Taepo Dong-2, the March report judged it *unlikely*, despite the extensive transfer of theater missile technology, that other countries (except Russia and China as just mentioned) will

*develop, produce, and deploy* an ICBM capable of reaching any part of the United States over the next decade.

Of course, the key words here were *develop, produce, and deploy*. As the report also noted, the purchase of a missile, either complete or as components of a kit, is a different matter. In fact, we identified several alternative scenarios for a country to acquire an ICBM capable of reaching the United States *sooner than 2010*, without having to develop, produce, and deploy one. These included buying an ICBM, a space launch vehicle (SLV) to convert into an ICBM, or a complete production facility for either. The report judged that the current policies of Russia and China make sales-related scenarios unlikely, given potential political repercussions, the creation of a self-inflicted threat, and China's own military needs. Our report also pointed out that we cannot be certain that this will remain true over the long term. Indeed, the further into the future we project the politico-economic environment, the less certain we would be that the 'value' of the sale would not outweigh these factors in foreign thinking. And, as North Korea develops its Taepo Dong missiles, sales become an increasing concern.

But ICBMs are not the only emerging missile threats to the United States. A number of countries have the technological wherewithal to develop the capability to launch ballistic (or cruise) missiles from a forward-based platform, such as a surface ship. Forward-basing from dedicated vessels or from freighters could pose a threat to the United States in the near term—well before 2010.

Our abilities to warn about the above-mentioned threats and postulated concerns vary. The 1998 report assessed that:

- We could provide *five years warning before deployment* that a potentially hostile country was *trying to develop and deploy* an ICBM capable of hitting the United States, *unless* that country purchased an ICBM or SLV (including having another country develop the system for them); had an indigenous SLV; or purchased a turnkey production facility. The comments I made earlier about our reporting over the years on North Korean ICBM development efforts underscore that warning ability.
- We could not count on providing much warning of either the sale of an ICBM or the sale and conversion of an SLV (conversion could occur in as little as two years). Nevertheless, if a hostile country acquired an SLV, we would warn that the country had an inherent ICBM capability. I note, however, that both the United States and the Soviet Union used systems we did not consider as ICBMs to place their first satellites into orbit. The satellite we orbited weighed only 14 kg.

These two warning capabilities must be understood in tandem. Unfortunately, the warning related to *sales* may dominate in the near term. As North Korea proceeds with its Taepo Dong developments, we assess that they will follow their current path and market them; at a minimum, aspiring recipients will try to buy them.

- We probably would obtain indications of the construction of a turnkey facility before it was completed, providing several years' warning.
- If a country had an SLV, it could probably convert it into an ICBM in a few years, significantly reducing warning time.
- Adapting missiles for launch from a commercial ship could be accomplished covertly and probably with little or no warning.

Finally, our report noted that *non-missile* delivery of weapons of mass destruction—biological, chemical, nuclear and radiological weapons—poses a serious, immediate threat to US interests at home and abroad.

**Outside Views of March 1998 Report.** The tests of several medium-range missiles since that report was published underscored our theater concerns expressed in March. The three-stage Taepo Dong-1's ability to deliver small payloads to intercontinental ranges underscored our concerns about the possibility of a North Korean ICBM test this year. Since our March report was published, the Rumsfeld Commission and others have also commented upon the threat. There is broad agreement on several points:

- The threat is real and growing.
- Foreign assistance and proliferation are the fundamental reasons for the growing threat.

- Foreign denial and deception and resource constraints are making our job more difficult.
- There are plausible scenarios that could result in an increased missile threat to the United States with little or no warning.

Since information is limited, we also have some areas of disagreement. Our projections for North Korea, Iran, and Iraq differ from the 5-year general statement made by the Rumsfeld Commission. We project each country's programs individually, taking into account collaboration and foreign assistance:

- Thus, we were able to illustrate our view that North Korea is ahead of the others and could have an ICBM sooner, primarily because we believed that North Korea probably made the decision to acquire an ICBM at least a decade ago.
- The recently tested Iranian Shahab 3 is based on the North Korean No Dong and followed North Korea's test, even with foreign assistance, by several years. Nevertheless, Iran will continue to seek longer range missiles. If Iran follows a pattern similar to the Shahab 3 time frame, it would take them many years to develop a 10,000 km range ICBM to reach the United States. On the other hand, if they purchased an ICBM from North Korea or elsewhere or followed the approach North Korea recently demonstrated of placing a third stage on its boosters, it would be quicker. If they bought an ICBM with a sufficient range and payload capability, further development might be a moot point.
- When the Commission published its report in July, it considered Iraq to be behind North Korea and Iran relative to ballistic missile technology, assessing it would take Iraq 10 years from decision to deployment for an ICBM. Two months later, the Commission revised that judgment before the Senate Armed Services Committee, dropping the timeline to 5 years along with North Korea and Iran. We consider Iraq to have some advantages over other countries. Iraq was ahead of Iran before the Gulf war, and it has not lost the technological expertise and creativity. If sanctions were lifted, it would take them several years to develop a 9,000 km range ICBM to reach the United States. As with Iran, if Iraq purchased an ICBM, or followed the approach North Korea recently demonstrated, it would be quicker. If they bought an ICBM with a sufficient range and payload capability, further development might be a moot point.

**1999 Report.** We are already working on the 1999 annual report and are planning to include significant additional outside expertise and red teaming:

- Private-sector contractors are helping us identify alternative development paths that future ballistic missiles could take, including specific technologies and potential hurdles involved. These efforts include assessments of the effects of increased foreign assistance.
- We have scheduled a conference with the Center for Strategic and International Studies to have academia and others postulate future politico-economic environments that foster missile sales and increasing foreign assistance.
- This summer, the Intelligence Community published a classified paper that postulated ways a country could demonstrate an ICBM capability with an SLV, and examined various ways it could convert its SLVs into ICBMs. This work will also feed into the 1999 report as a generic look at some alternative approaches.
- Finally, drafting is underway on a paper that examines how countries could push Scud technology beyond perceived limits. Scientists and nonscientists are involved. Sometimes, those already outside the box can think outside the box more readily.

We also intend in the 1999 report—after discussing our projected timelines for likely missile developments and deployments, as well as our concerns for ICBM sales—to postulate and evaluate many alternative scenarios, including those mentioned above. Finally, we will be much more explicit and detailed in our discussions about warning. All these evaluations will be made through the lens of potential denial and deception efforts, to ensure that as our task gets more difficult, we provide our policy makers with a clear representation of what we know, what we don't know, what we can't know, and finally what we judge based on evidence, the lack thereof, and expertise from inside and outside the government.

**Conclusion.** In conclusion, I'll state that we, the Rumsfeld Commission, and some other outside experts agree that the missile threat confronts the Intelligence Community with an array of

complicated problems that require innovative solutions. I would also emphasize how appreciative we are of the Commission's work. I particularly like the fact that they received approval to publish a relatively detailed unclassified report on the threat. We gave the Commission access to all the available intelligence information, regardless of classification.

Finally, the Commission made a number of excellent recommendations for how we can improve collection and analysis on foreign missile developments. Indeed, its report reinforces the DCI's call for a stronger investment in analysis and more aggressive use of outside expertise. Incorporating the Commission's ideas will strengthen our work. The missile threat is a serious and complex issue, one of many others that the Intelligence Community is working. We use many vehicles, including estimates, briefings, and annual reports, to convey our analyses and warnings to policy makers and Congress. We will continue to do so on this and other issues.

---

[\[Speeches and Testimony Page\]](#) [\[Public Affairs Page\]](#) [\[CIA Homepage\]](#)

Page last updated: 11/13/2017 13:56:11.

---

If you have questions or comments about this Web site, [Contact Us](#).

**NATIONAL  
SECURITY  
ARCHIVE**

This document is from the holdings of:

The National Security Archive

Suite 701, Gelman Library, The George Washington University

2130 H Street, NW, Washington, D.C., 20037

Phone: 202/994-7000, Fax: 202/994-7005, [nsarchiv@gwu.edu](mailto:nsarchiv@gwu.edu)