		7 24 ,	, 가?					
			가					,
	2002	10 4				가		5
		,	가					
,		가			,		가	
2002	가 17		,		3	9	가	
		, ,					가	
	가		2002			, 가	"	
	(CIA)		2003	가	"			
2002		"	.(가 , 2003	7 15)		
	11 " 가	, "	"	"	"			u
		,	٠	6	2002 11 가			

가 , 235 가 4.4% (LEU) 가 93% 가 . (HEU) (NPT) (IAEA) 1994 2 가 60kg 1 가 , 1300 3 가 -21 가 가 가 가 가 ()

)

It is now widely accepted in Washington that the Bush Administration manipulated intelligence information to justify the invasion of Iraq.

By contrast, in the case of Korea, most U.S. observers still accept the Administration's assertions that North Korea is developing a weapons-grade uranium enrichment capability. But is there evidence to back up these assertions? Or has the White House exaggerated the uranium threat in order to block the improvement of South Korean and Japanese relations with Pyongyang and to put North Korea on the defensive in the negotiations on a nuclear settlement?

The June 24 U.S. proposal for resolving the nuclear issue envisions a detailed denuclearization agreement. Before discussions can even start on the agreement, North Korea would have to say that it has enrichment facilities and to specify where they are located. Since Pyongyang denies that it has such facilities, this U.S. precondition has predictably blocked the start of negotiations.

The uranium issue first surfaced on October 4, 2002, when Assistant Secretary of State James Kelly confronted North Korean leaders with accusations of a secret weapons-grade enrichment program during a visit to Pyongyang.

A review of events during the five months preceding his visit strongly suggests that Washington was alarmed by the increasingly conciliatory policies being followed by Seoul and Tokyo toward Pyongyang and suddenly unveiled the uranium issue to pressure them into reversing this trend. Authoritative sources in Seoul and Tokyo say that the evidence presented by Washington was, and still is, fragmentary and inconclusive, sufficient to suggest the possibility of a pilot, experimental enrichment program, but insufficient to justify the assumption that one does exist or that any kind of operational weapons-grade capability has been developed.

What brought anxieties in Washington to a climax in 2002 was the visit that Prime Minister Koizumi made to North Korea on September 17 - a visit that Japan had been quietly exploring for more than nine months without telling the United States.

When Koizumi met visiting Deputy Assistant Secretary of State Richard Armitage three weeks earlier, the Prime Minister presented Armitage with a fait accompli. He did not ask for U.S. permission to go, and he refused to call off the visit even after Armitage told him that North Korea had a secret weapons-grade enrichment program.

Faced with free-wheeling South Korean and Japanese policies toward Pyongyang largely beyond its control, the United States "saw a real possibility that its options in Korea would increasingly be driven by the policy agendas of others," Jonathan Pollack, Chairman of the Strategic

Research Department at the U.S. Naval War College, wrote in the Summer, 2003, Naval War College Review.

In diplomatic language necessitated by his government think tank role, Pollack said, in effect, that CIA and other U.S. intelligence evidence did not justify the charges that Kelly made in Pyongyang.

Pointing to a CIA report submitted to Congress on November 19, 2002, Pollack wrote that "the imprecision in the CIA analysis underscored the difficulties of estimating the extant capabilities and ultimate purposes of the North's enrichment program" and left it unclear 'how complete and compelling the intelligence data may have been on which the United States decided to confront North Korea." Despite its limited knowledge about the uranium program, Pollack alleged, the United States "opted to exploit the intelligence for political purposes."

Pollack spoke even more bluntly to a New York Times columnist, saying that "we were using whatever intel was there on North Korea to step away from a set of obligations, to shine a shaming light on North Korea and perhaps to get others to put the heat on North Korea." (Nicholas Kristof, July 15, 2003).

An examination of the November, 2002, report shows why Pollack referred to its "imprecision." While alluding to "clear evidence" that North Korea had "recently" been constructing a centrifuge facility, the CIA did not explain the nature of this evidence, though it mentioned in general terms the acquisition of "centrifuge-related materials in large quantities."

Since November, 2002, no evidence to support this conclusion has subsequently been supplied to the U.S. Congress. After extensive inquiries in Seoul, Tokyo, Beijing, and Moscow over the past six months, I have concluded that no evidence has been provided to the other governments participating with the U.S. in the Beijing nuclear talks. My assessment is based on conversations with sources who have requested anonymity. China, however, has gone public on the issue. Deputy Foreign Minister Zhou Wenzhong told a New York Times reporter on June 7, 2004 that "so far, the United States has not presented convincing evidence of the uranium program. We don't know whether it exists."

The limited evidence that has, in fact, been provided to South Korea and Japan does confirm that North Korea has made efforts to buy equipment that could be used to make centrifuges, such as frequency converters, high-purity cobalt powder for magnetic-top bearing assemblies and aluminum tubes that could also be used to make artillery. In most of these cases, it is not clear whether the purchases were ever made and, if so, how much was purchased.

There is a huge difference between producing low-enriched uranium (LEU) - the fuel needed to power light-water reactors, which is enriched to a U235 content of 4.4 percent - and weapons-grade, high-enriched uranium (HEU), which is enriched to 93 percent. Signatories of the nuclear non-proliferation treaty are permitted to possess LEU facilities for their nuclear reactors if these facilities are open to International Atomic Energy Agency (IAEA) inspection.

Conceivably, North Korea started developing such a capability so that it would not have to rely permanently on foreign-supplied fuel for the two light water reactors being built under the 1994 Agreed Framework.

When I asked Vice Foreign Minister Kim Gye Gwan on April 21 whether Pyongyang possessed civilian enrichment facilities, he quickly denied that it had any type of enrichment program. However, his Foreign Ministry colleague, Li Gun, edged toward acknowledgement of such a program when he was asked a similar question at a New York seminar on August 12, saying, "we are entitled to have it for peaceful purposes."

Nuclear scientist Richard Garwin has estimated that 1,300 high-performance centrifuges would have to operate full time for three years to make the 60 kilograms of fissile material needed for one "gun-type" nuclear weapon. This production rate would require an enormous sustained input of electricity. Moreover, the operation of a multi-centrifuge "cascade" requires a high-powered motor with a speed twice that of a Mig-21 jet engine. Since North Korea cannot produce Mig engines for its Russian-supplied Migs and has limited electricity capabilities, it is reasonable to question whether it can operate the number of centrifuge cascades needed for weapons-grade enrichment over a protracted period.

The view that North Korea will overcome such technical obstacles is based on the assumption that it is getting the necessary help and equipment from Pakistan. Recent revelations of the nuclear black market activities of the ousted director of Islamabad's nuclear program, Dr. A.Q. Khan, have strengthened this assumption. However, the facts concerning the Pakistan-North Korea connection remain murky. Dr. Khan has not discussed it publicly, and conflicting versions of North Korea-related statements have been attributed to him. No foreign access to Dr. Khan has been permitted, reflecting the political sensitivity of his case not only in domestic Pakistan politics but also in Pakistan-U.S. relations.

Whether or not an advanced enrichment capability exists - and if so, how close it is to producing weapons-grade fissile material in significant quantities - would be difficult to determine without North Korean cooperation as part of an agreed denuclearization process with intrusive inspections. The United States and South Korea should insist on such inspections as part of a denuclearization agreement.

Unless conclusive new evidence comes to light, however, the uranium issue should be deferred until the final stages of a denuclearization agreement that should begin by focusing on North Korea's demonstrated plutonium capabilities. / By Selig S. Harrison

< : 2004. 9. 7>