



An 1998 photograph of a KPA DMZ guard relaxing atop a guard post. Mounted along the railing are two “tri-top” communications antennas. (Joseph S. Bermudez Jr.)

Contents

KPA Antennas (I).....	1
Jong Kyong Hui (Chông Kyông-hui)	3
A North Korean Nuclear Defector's Own Words	4
KPA 17 th Tank Brigade, 1950-1952, Part IV	9
Editor's Notes.....	10
Endnotes.....	11

KPA Antennas (I)

By Joseph S. Bermudez Jr.

Korean People's Army (KPA) communications equipment and COMINT capabilities are subjects of great interest for a large number of *KPA Journal* readers. This article is the first of an occasional series that will provide brief insights on these subjects based upon interviews with experts and other open-source data.

In the above image two “tri-top” antennas can be seen

mounted along the railing of a KPA DMZ guard post. A communications expert described the antennas as follows,

“That tri-top is an old trick.

Those are 30-50 MHz communications antennas. Usually FM. The tri-top is a way to make them somewhat broader in frequency coverage. Normally vertical antennas like that have a bandwidth of about 1/2 MHz. With the tri-top that can be more on the order of 1-2 MHz.

Now if this were the “old days,” they would be using Chinese 884 radios (Vietnam era). These are very similar in capability to the US PRC-25 (Vietnam era), US PRC-77, or the UK RT-350. These days they would probably use a little cheapie Chinese commercial radio.”

A second image from January 2012 shows Kim Jong-un during a guidance tour of a forward observation post. In the background can be seen soldiers from Kim's personal bodyguard standing in front of an 8-pole circular antenna array. In assessing the possible purposes of this antenna array a communications expert provided the following,



This January 2012 photograph shows Kim Jong-un visiting a forward observation post. In the background is can be seen two of Kim's personal bodyguard standing in front of a PKM 7.62 mm light machinegun and a 8-pole antenna array. (KCNA)

"There are several things it could be.

1. Acoustic counter-fire system. These use the sound time delays and multiple elements to determine a bearing line to the source of gunfire. The spacing and orientation matches that type system. But the vertical elements aren't typical; the acoustic counter fire type systems have a ball on the end of each element.

2. RF pseudo-doppler direction finding system. It looks like an 8 channel pseudo-doppler direction finding antenna for 50-500 MHz. Bearing accuracy is about 10 degrees based on dimensions. The give away is antennas of 2^n elements equally spaced about a central point. The fact the elements are not terribly uniform with a hard coating indicates a tactical system designed for fast deployment. But if you look at the feed lines they are large diameter; this is more characteristic of a transmitting system rather than a receiving system.

3. Multiple independent VHF FM transceive systems. The antennas and feed match typical systems from 30 - 300 MHz. Feed line diameter typical of up to 500 Watt transmission at these frequencies. Systems such as

this use coaxial cavity resonators to provide necessary isolation between channels. A similar configuration is seen at US airports for the 108 - 136 MHz VHF aircraft band at airport tower communication sites. Indicates a nearby command and control facility. The element length appears optimized for 1/4 wave at lower frequencies or 5/8 wave at 152-174 MHz frequencies.

4. Could be similar to 3. Except be FM communications repeaters to extend the range of smaller handheld or vehicular units at 30 - 300 MHz line-of-sight frequencies. Locate at high geographic locations for maximum range extension of mobile ground unit communications.

Given the high altitude and long optical sight lines visible in the background I opt for either 3. or 4."

Except where noted KPA Journal is Copyright © 2010-2012 by Joseph S. Bermudez Jr. All rights are reserved. Permission for reprints can be obtained by contacting kpajournal@gmail.com.

Jong Kyong Hui (Chông Kyông-hŭi)¹

By Michael Madden²

Jong Kyong Hui (Chông Kyông-hŭi) was a senior member of the DPRK intelligence community and veteran intelligence operative with tours in the Republic of Korea (ROK) and Japan. She was a member of the Central Committee Korean Workers' Party (CC KWP) and during the 1980s was an alternate (candidate) member of its Political Bureau. According to DPRK state media, she died in 1996.

Jong was born in Taegu, Kyôngsŏng-pukto (today Daegu, Daegu-gwangyeoksi), ROK in the late 1920s. She left girls' middle school, worked as a telephone operator and joined the South Korean Workers' Party in about 1945. In 1949, she was arrested and incarcerated when she detonated an explosive device in an Inchŏn (today, Incheon) telephone switchboard office. During the Fatherland Liberation War (i.e., Korean War), Jong escaped custody and fled to the DPRK.

In the DPRK she completed her secondary education and went on to study at the Central Party School. She graduated from Kŭmgang Political Academy in 1954 and in 1956 was appointed a guidance officer in the Propaganda and Agitation Department (PAD) of the Hamgyŏng-namdo (South Hamgyŏng Province) party apparatus. In 1961 she became the deputy director in Hamgyŏng-namdo propaganda and agitation apparatus.

During the mid-1960s she worked in the Liaison Department under the South Korea General Bureau as an infiltration agent. On several occasions she traveled to Seoul and Tokyo to meet with, and task, operatives as well as collect information. (To understand Jong's position at this time, one might look to the "Granny" character played by Margo Martindale on the FX series *The Americans*). Her performance in anti-ROK operations were considered exemplary by Kim Il Sung. After instituting reform of the DPRK's intelligence community in the late 1960s Kim purged many senior officials and Jong's career advanced.

She was elected a full (regular) member of the Party Central Committee during the Fifth Party Congress in 1970. In 1971 she was appointed director of the External Liaison Department (ELD), under the CC KWP Secretariat. From 1973 to 1975 she was director of the Culture Department. In this position she supervised the expansion of the training and education programs for infiltration agents. In May 1975 she returned to her former position as ELD director, where she was responsible for the daily operational management of anti-ROK intelligence collection and operations.

In the 1970s Jong became a key DPRK intelligence community supporter of Kim Jong Il's succession. She oversaw the Culture Department's migration into the United Front Department, while continuing to plan and manage

operations targeting the ROK. Jong also became a close social cohort of Kim Jong Il's, attending banquets and parties with aides and political allies. At the Sixth Party Congress in October 1980 Jong was elected an alternate, or candidate, member of the KWP Central Committee's Political Bureau. She appeared as a rostrum member at parades and other national events.

In the early 1980's Jong either planned or directed several major operations against the ROK as director of the Liaison Department. On 23 September 1983 a bomb detonated at the American Cultural Center in Taegu, ROK, killing four ROK civilians and injuring two others. Jong was later identified as being the Liaison Department official who managed the agents involved.

During the late 1980s Jong Kyong Hui lost her position as an alternate member of the Political Bureau and she was not elected to the Ninth Supreme People's Assembly that was held in 1990. She passed away in June 1996.

Jong Kyong Hui was a tall, handsome woman. She was a shrewd analyst, indefatigable, and an astute intelligence operative. She was injured during her incarceration in the 1940s and walked with a moderate degree of difficulty. She was briefly married, but was separated from her husband due to an inability to conceive children. Jong had close ties to Kim Jong Il who, making a rare exception in relationship to subordinates, regularly dined at her residence.

ROK actress Choi Eun Hee, abducted to the DPRK from Hong Kong in 1978, interacted with Jong at several of Kim Jong Il's banquets. Choi described Jong Kyong Hui as "looking at [Choi] with cold eyes." When Choi was taken to vote in SPA elections in 1982, Jong was the deputy for whom she voted.

Positions Held by Jong Kyong Hui (1928-1996)

1940s: Telephone Switchboard operator, Korea Telephone and Telegraph

1956: Guidance Officer, Propaganda and Agitation Department, Hamgyŏng-namdo (South Hamgyŏng Province) KWP Committee

1961: Vice (Deputy) Director, Propaganda and Agitation Department, Hamgyŏng-namdo KWP Committee

1963: Infiltration agent, Liaison Bureau, South Korea General Bureau

1968: Guidance officer, Liaison Bureau, South Korea General Bureau

1970: Elected, Member, Party Central Committee (CC KWP)

1971: Director, CC KWP External Liaison Department

1973: Director, Culture Bureau, CC KWP External Liaison Department

1975: Director, CC KWP External Liaison Department

1980: Elected, Alternate (Candidate) Member, CC KWP Political Bureau

1982: Elected, Deputy (delegate) 7th Supreme People's Assembly (SPA)

1986: Elected, Deputy (delegate) 8th SPA

1987 (ca.): Removed from political office

In a North Korean Nuclear Defector's Own Words

by Bill Streifer and Sang S. Nam³

According to experts, the weaponization of North Korea's nuclear weapons program began in the early-1960s or early-1970s.⁴ And yet, it was not until October 2002, during high-level meetings in P'yongyang with Assistant Secretary of State for East Asian and Pacific Affairs James A. Kelly, that North Korean officials admitted they were pursuing a nuclear weapon.⁵ Four years later, on October 9, 2006, North Korea became the eighth nation — or perhaps ninth—to conduct a nuclear test.⁶

To date, North Korea has conducted three underground nuclear tests. The nuclear fuel used—plutonium and perhaps highly enriched uranium (HEU)—was produced at the Yŏngbyŏn Nuclear Research Center about 55 miles north of P'yongyang, North Korea's capital. In 2000, a female nuclear researcher who had worked at the Pun'gangni (Pungang) branch of the Yŏngbyŏn Nuclear Research Center defected. And in June 2002, she was interviewed by "Rescue! The North Korean People" (RENK), a Tokyo-based Japanese civic organization supporting North Korean defectors. Using the alias Lee Mi (Beautiful Plum), Ms. Dong Chun-ok's answers to thirteen questions were then published on RENK's website in Japanese.⁷

Although excerpts from Dong Chun-ok's interview appeared in the South Korean press⁸ and large portions were later translated into English and published in *Korean Web Weekly*,⁹ the website of North Korean-born nuclear physicist Dr. Kim Young Sik, an English translation of Ms. Dong's *entire* interview has never before appeared in print or on any website. Although some of the "facts" in the interview "are not accurate," Dr. Kim stated that, "the general picture described is correct as far as I know."¹⁰

Dong Chun-ok's Interview

Question #1: State your personal identities, education, career and experiences, the names of North Koreans who are in the field of nuclear project. Under whom have you studied and who were the ones you have spent your working life together?

Answer #1: Name: Dong Chun-ok

Sex: Female DOB: August 2, 1955

Birth place: P'ungŏ-gun, Yanggang-do

Family status: Father; Dong Mun-wha died November 27, 1957.

Mother: Lee Ok-tan, worked at #66 Project Office of Atomic Science Committee, Pun'gangni-nodongjagu (Pungang District). Retired in 1995.

Elder sister: Dong Sang-ok worked at Atomic Science Committee

Dong Sang-ok's husband (brother-in-law): Kim Sang-beom Chief of #1 Special Team, #66 Project Office of Atomic Science Committee.

Younger sister: Dong Bun-ok Myŏngchŏn-gun, Hamgyŏng-bukto

Dong Bun-ok's husband: Tae Cheol-su, Party clerk at Chilibosan Foreigners Tourist Hotel, Myŏngchŏn-gun, Hamgyŏng-bukto.

Education:

Attended Pun'gangni People's School (+elementary); March 1, 1962-1965

Pun'gangni High School; March 1, 1965-1969

P'yongbuk Physics University: 1969-1974 Graduated Experiences:

After my father died on January 27, 1957 in Oro-gun, Hamgyŏng-namdo (now, Yŏnggwang-gun), my mother was secretly summoned by the Central Party in the summer of 1960 and moved into a special base of Pun'gangni Atomic Energy and Science Committee, Yŏngbyŏn-gun, P'yŏngan-bukto. Since my graduation from the university in the summer of 1974, at #25 Branch Office, and #304 Research Center of Atomic and Science Committee.

- June 15, 1977: Married to an officer at Air Command Center and moved to P'yongyang.

- April 25, 1978: My first boy was born.

- Until 1980, lived as a military family at Air Command Center

- Starting from the summer of 1980, worked as a planning leader of Management Department, Metropolitan P'yŏngyang.

- Starting from 1982, worked as a booking clerk of P'yŏngyang City Railroad Department.

- Starting from 1983, became a leader for the safety of residence registration for the Railroad Region, as recommended by the Management Department of the Railroad.

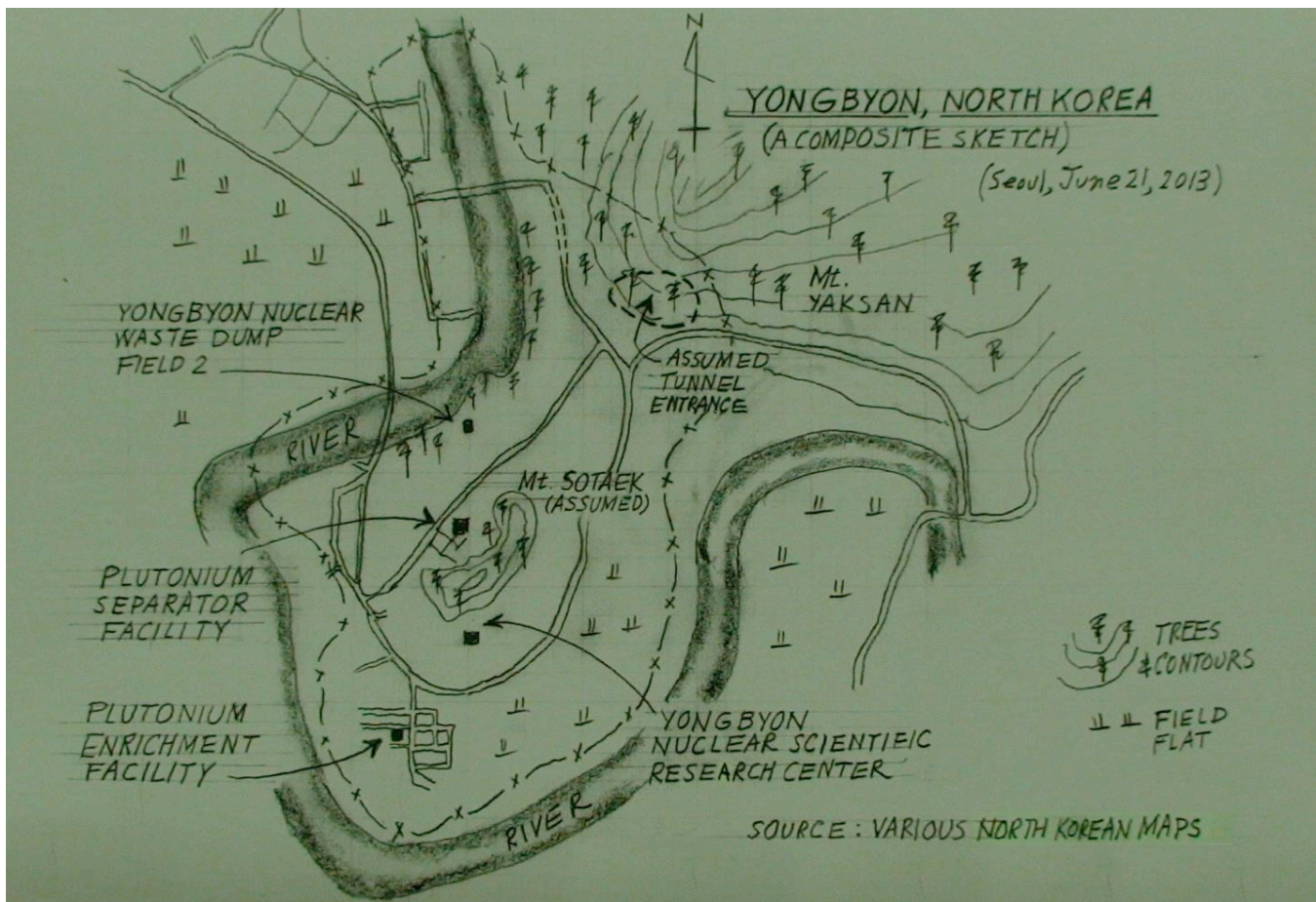
- October 1990, moved to Yanggang-do as husband was discharged from the service.

- June 1991, divorced husband. Lived in my mother's house in Pun'gangni-nodongjagu, Yŏngbyŏn County, P'yŏngan-bukto, but moved to Hyesan City, Yanggang-do due to children's problem.

- Starting from October 1995, assumed the position as Leader of Trade, Yanggang-do of People's Military/Political Division

- February 21, 1999, received order to suspend work.

- September 2000; escaped to China.



A sketch of the Yŏngbyŏn Atomic Energy Research Station prepared by Sang S. Kim, based upon the interview with Dong Chung-ok and open source information.

- Before the inspection, the chairman of the Atomic and Science Committee was Pak Gwan-oh (currently President of Kim Il-sung Integrated University). After the investigation it received direct control of Kim Jong-il but after Kim Il-sung's death in 1994, the supply and control have weakened. Currently, it is being reinforced and strengthened.
- Secrecy is guaranteed in the field of nuclear and the researchers were paid extra 20-30% for the living expense as the price for the secrecy guarantee cost.
- All the research institutes are being called by secret numbers; 101, 304 and 206 Laboratories, 175 Business Office, 66 Business Center, August Enterprise, February Enterprise, or using a disguised name such as, for the meaning of often utilized, "Utilization Research Laboratory" generally used in a variety of applications. Each research laboratory cannot contact others and they are under strict control and regulations.

The 304 Research Center where I used to work;

Chief: Do Won-son PhD, (Kidnapped from South Korea in 1950)

Head of laboratory: Kim Dol-su, PhD, (Studied at Dubna in Russia)

Party Secretary: Pak Min-jon, PhD, (Studied abroad for 15 years)
 Hwang Jun-man, PhD, (Studied in Russia)
 Kim Jun-bok, PhD, (Studied at Dubna)
 Kim Dong-su, PhD, (Studied at Dubna)
 Kim Kyong-sun, Third class researcher (Studied at Dubna)
 Hyon Chul, (Studied repeatedly at Dubna)
 Kim Dong-hwi (Studied in Czechoslovakia)
 Kim Ok-nyo (Studied in Russia)
 Responsible person of the Regional Party of Pung'angni-nodongjagu:
 Kim Yong-sik who used to work as a 304 researcher.
 P'yongbuk Physics University,
 President: Kim Myong-hwan
 Teacher in charge: Kang Sin-jo
 (The materials I've confirmed up to the year 1998)

Question #2: Please state the functions, organizations and important personnel names of 101, 206, 304 Research Center and other facilities in Yŏngbyŏn.

Answer #2: All the important facilities, buildings for the research laboratories, related features, and nuclear reactor were built under the supervision of Russia and by Russian materials and equipment while they were there.

After Kim Il-sung had grabbed the regime, for the purpose of developing nuclear arms, he had ordered the double-agent and republic's spy hero Lee Hak-mun to abduct Dr. Lee Seung-ki, Dr. Do Won-sun, Do Sang-rok researcher, etc. from South Korea, and he did. After that, the Atomic and Science Committee, which was located in Hamhŭng, was expanded to Pun'gangni-nodongjagu in Yŏngbyŏn-gun, P'yŏngan-bukto starting in late 1950. The one at Hamhung was established mainly by Dr. Lee Seung-ki as a branch institute while making Pun'gangni-nodongjagu as the home research center, for which Do Won-sun [may be read as Do Won-sop] and Kim Do-sul played as the main organizer.

Question #3: Please state the functions, organization and facilities and the products of 175 Factory, August Business and other enterprises in Yŏngbyŏn.

Answer #3: 304 Research: The center is important laboratory among the laboratories in Pun'gangni-nodongjagu, and it is the main research center for nuclear weapons development as well as for chemical arms development. Over 70 percent of the researchers of the group have studied overseas and restudied for the research. The emphasis is placed on the nuclear weapons development but they also participated in the chemical weapons development. Total number is about 150 persons. Every room of the researchers is guaranteed with laboratory, shower and modern facilities. Assistant is assigned to every doctoral researcher and research worker. About 70 to 80 percent of the researchers at 206 Research Center are professionals in the physics field. And it is the important research center for the nuclear weapons development in Pun'gangni-nodongjagu.

Yiyong Research Center: Although the name implies "economical utilization" it produces a variety of facilities including general weapons by locating a branch laboratory in Pakchŏn. The number of personnel is about 150.

175 Factory: The factory produces appliances for laboratory experiments needed at Pungang Research Center.

August Enterprise: It was newly built research center after the surveillance by United States (of 1990s' nuclear inspection). It has installed railroad from Pun'gangni-nodongjagu which is hidden in a forest outside the perimeter. It supplies the laboratory testing requisites after directly processing uranium supplied from Pakchŏn Branch Laboratory.

101 Research Center: For the purpose as research center, it's the same as 304 or 206. The number of personnel is about 100.

66 Business Office: Responsible for the construction of living quarters, and maintenance of the facilities and supply of materials in the premises. It employs about 20,000 personnel.

February Enterprise: The enterprise was newly made after the 1990's surveillance, which holds nuclear reactor, so I heard from a research colleague with whom I've worked.

Export/Import Material Company: This organization supplements materials for the research center by importing them from foreign countries.

Question #4: Please state the functions, organization, facilities and the storing capacity of underground nuclear facilities in Yaksan Dongdae and Mt. Sotaek. And, describe in details when the underground facilities were dug, constructed, and the conditions of the entrance, etc. as much accurately as you remember. It would be much helpful if you could draw sketches showing exterior of the entrance, shape and location. When and why did you visit the underground facilities?

Answer #4: I was mobilized to a simulation exercise conducted in the summer of 1976 and I went inside of the place. The underground facilities at Yaksan Dongdae were built by 66 Business Center. There were many human casualties by accidents during the construction stage so that the Chairman's fund was poured into all the material needs including cement. It was constructed after 1965 and the work was completed before 1970. I still remember that the facilities were unusually large and inside of all the caves were branched out in various shapes. The entrance to the cave was very large. The surface of the cave entrance was paved by finely finished cement and the inside was lighted.

[The use of the underground facilities]

The cave was built to accommodate all the materials and laboratory testing equipment and important systems when an emergency or surveillance is being proposed. Anticipating inspection by International Atomic Organization, all the equipment in the research centers had been relocated when the inspection was actually conducted. The news of possible inspection had been informed to all the researchers in advance and when the inspection was made, it was ready to be inspected.

[Sotaek-san]

Mt. Sotaek is located in a residential area. It is located behind a hospital and has two entrances. It's an emergency shelter for the nuclear researchers and it was lighted. The inside is branched out to several offshoots caves. I entered there during a simulated exercise in 1976. The cave is under control after that, and couldn't enter.

Question #5: Please describe in details the names, location, organization and its facilities of the science university you've once stated.

Answer #5: Its name is P'yongbuk Physics University. The president is Dr. Kim Myong-hwan. It is located, passing through a manned gate, at next to a hospital in residential area, and there are two high rise apartments. The university is for the education of researchers in the field of nuclear engineering who are mainly of children of nuclear professionals at Pungang. Especially brilliant persons from all over the country, if they fully understand the basics of politics, the university is accepting some in recent years. Now it's directly controlled by the Central Party. The number of students is 300 and it's gradually increasing. The number of teaching staff is about 50 and they are chosen from the researchers at the basic research center.

Question #6: Are you aware of the progress of relocation of the researchers and the nuclear facilities from Yöngbyön to other location? If there was relocation, please explain how researchers were reassigned and to which facilities, when, and why it's relocated, and the name of the new location. Tell us, if the nuclear reactor was relocated from the center of Yöngbyön before the International Atomic Organization conducted its inspection, why it was relocated. Where is the nuclear reactor now? Do you know if it was ready to show a part of North Korean nuclear program for inspection by the International Atomic Organization? If it was ready for the inspection, for what purpose and what kind of preparations were ready?

Answer #6: When it foresaw the inspection while the world kicked up a fuss about North Korea's having nuclear arm in 1990, some of the peoples in Pungang area were asked to wear military uniform, putting shoulder straps on the labor class, officer's uniform on the executives and researchers, and together with their families they were secretly moved. New base was relocated to P'yöngsan-gun, Hwanghae-namdo [error for Hwanghae-bukto], and at that time, even internally in the business region, it was kept as top secret. My elder sister's husband was responsible person and directed the relocation and went there several times. All the materials to be sheltered were evacuated into cave when it received the inspection. Currently the nuclear reactor is located at February Enterprise of 304 Research Center.

Question #7: How much does the personnel and scientists know about the leakage of nuclear radiation?

Answer #7: Until presently, physical damages have shown on some of the researchers and persons who are related and unnatural babies were born. It is generally recognized as it was not a big accident.

Question #8: If you know about compositions of the nuclear arms program of North Korea, please explain their details and from where you've heard. How much do you

know in addition to the past efforts on the production of plutonium at Yöngbyön, about the efforts put on for other fissionable material? If you know please describe in detail about its essential activities, the time, and the locations. Are there any retreatment facilities for nuclear fuel besides the radiation chemical experimental laboratory? Have the North Korean scientists ever showed interest in uranium enrichment? If so, please state it in detail.

Answer #8: The research center at Pun'gangni-nodongjagu is the research organization specialized in modernized military arms and the (illegible) produced by each laboratory at Pungang is not produced within Pun'gangni-nodongjagu. The researchers bring their own research products to the experimental factory or arsenal for its tests, and generally all of the research products are sent to section chiefs or managers who are doctoral researchers, and finally it was handled by the deliberative committee, after passing through strict seminars.

It will be actually tested only after having recognized at this committee. There is chemical factory within the arsenal for the production of important arms. Pakchön laboratory handles all the materials of nuclear division, besides Yöngbyön. It is thought that the base for the production of nuclear division and arms is hidden at P'yöngsan in Hwanghae-bukto which was classified before the inspection.

Question #9: Do you know anything about travels to foreign countries or training by nuclear scientists or engineers? If you are aware of it, please describe purposes of study and travels. Do you know anything about travels or reallocation of foreign scientists or professionals in North Korea? If you know, what were the purposes of travels and relocation and the timing and what were the specialties of the foreign scientists or specialists?

Answer #9: Pungang Nuclear Science Committee was established in late 1950s by the scientists and advisors of Russians who came to Pungang in concentration. They, with their families, built villas along the bank of Kuryong River and shuttled to and from the research center. Training studies by researchers were made mainly in Russia and China, and they were physics and chemical specialty fields of students at a various nations' universities. And many of them went back to restudy at Dubna Science Center in Russia, when research center is built again. The scientists are prohibited to make private exist and entry within the country or from and to overseas countries and they are forbidden to meet outsiders.

Depending on the themes of the studies, and when it is decided that it's impossible to solve the posed questions within the country, then a requisition may be filed for overseas study and gets its approval.

When many anti-national activities are exposed and when they were sent to political prisoners' camp, after that, at some time, the overseas study had been regulated.

After the war of 1950, for the purpose of development of nuclear weapon by Kim Il-sung, Lee Hak-mun (hero of the republic's double reconnaissance) had kidnapped from South Korea Dr. Lee Seung-gi, Do Sang-rok, Dr. Do Won-sun and so on. After the war ended in 1953, they first started to build research center in Hamhŭng-si, and later it was developed to "Atomic Science Committee" officially, and then established "Nuclear Science Committee" in the geographically fitting basin of Pungang.

A total number of Russian advisors and foreigners are about 200. I do not know the exact figure. Before 1970, all secret and Russian advisors' materials were pulled out of strongbox and photo copied, and then all the foreigners were withdrawn from the country. After having established Security Squadron and military guard posts of People's Military Division, the country sustained itself since.

In my childhood years, my mother took me to foreigner's resort villa, and I received some gifts and played with the children's of foreign advisors in the perimeters. A person named Alexander of the research center especially loved me. After that, I stayed at mother's home for 40 days in August 1998, and I saw Russians coming in and out of the restricted area.

Question #10: Please state, if you know anything about the origin, administration, and fuel supply of the nuclear reactor for research use that was provided by Russia.

Answer #10: The nuclear reactor located in Pungang was installed at the same time with the construction of Pungang Research Center. After that, Pakchŏn branch laboratory and February Enterprise's were built after the inspection. Fuel supply is also coming from Pakchŏn branch laboratory. As I understand, all the supplies are conducted by Russia, and some are coming from China in recent several years. Each Section and by each Research center, they are classified as confidential.

Question #11: Please state names, organizations, locations and the functions of nuclear related facilities other than Yŏngbyŏn area.

Answer #11: Establishing Pungang nuclear base as the basis, the largest branch laboratories are Hamhung branch and Pakchŏn branch. Dr. Lee Seung-ki was the principal at Hamhung branch. It trains newly growing modern researchers and basically specialize the development of chemical weapon and organisms. It has testing laboratories and so on, which are needed for the incubation of bacteria, etc. At the first stage, they use rabbits or mouse and squir-

rels for animal tests, but for the first hand experiments, they employ prisoners or felons by using injections.

Pakchŏn branch: Directly handles basic uranium

Hyewon branch: Studies basically about China and its purpose is for the researches of China's radiation and air contaminations.

Question #12: Please describe about falsehood efforts and plots related with the North Korea's nuclear program.

Answer #12: After the inspection, they covered the chain of Yaksan Mountains with trees, and newly built February Enterprise and August Enterprise. In order to prevent taking high altitude photos from sky, they created many wooden houses in steps, and opened in the woods outside the perimeters. At Pakchŏn branch too, they installed many woods, locating them by the foot of crag sides so that they cannot be distinguished. By a glance it looks nothing is there, but it's there behind the hill.

Question #13: You said the children of Prof. Kim at work place of 304 Research Center did work for their father and they have received education at outside the country, please tell us where and the names they used to get the study. You've also mentioned that their children are participating with the Taepodong program, please state about the Taepodong program, the purpose of Taepodong, and the kind of relationships with the Room 304.

Answer #13: The name of Prof. Kim's son is Dr. Kim So-in and is about 30 years old. Prof. Kim and his wife are both nuclear specialist and his brother works as direct assistant to Dr. Kim So-in. Dr. Kim So-in was born while studying in Russia, in Dubna, and returned to Pungang when he was 3 years old (currently his birth place is listed at Chung-guyŏk, P'yŏngyang-si), and entered Pungang Senior Middle School when he was 7 years old but he was so genius that the teachers couldn't teach him. As reported to Kim Il-sung and Kim Jong-il, he was recruited to Special and Science Colleges of Kim Il-sung Synthesis University and received private tutoring.

He met his parents when he was 13-years-old and secretly sent to study at a foreign country (it was kept secret which country).

He received a semi-doctorial degree at the age of 19, and received doctor's degree when he was 21 years old. Dr. Kim So-in was a doctor who deliberately raised by Kim Il-sung and is the successor of Dr. Lee Seung-ki of Hamhung branch.

Kim Jong-il is secretly nourishing some 20 young doctors in his hands to raise them as military specialists in the modern warfare providing with them the highest quality treatments. In the group, it includes the son-in-law of Dr. Lee Seung-ki and his grandson and the core among the

researchers for the modernization of military is Dr. Kim So-in. His private and working life is kept as a top secret and completely shut out from the outside world, and he receives orders directly from Kim Jong-il.

The word of Kim Jong-il goes: "I'll unify the fatherland by these 20 young scientists of new generation."

His father is at 304 research center. There is no relation with his father except he is son of nuclear specialist.

The alias of Nuclear Science Committee (Atomic Committee) is "Chosun P'yŏngyang #204," and 304 Research Center is #19, 66 Enterprise is #17, and it starts with #26 for the numbers of telephone and vehicles. The Commander of Security Squadron for Social Safety Division of Pungang Nuclear Science Base is Ra Chang-sik. The Nuclear Science Committee is recently being reinforced.

KPA 17th Tank Brigade (Tank Division, Mechanized Brigade, Mechanized Division), 1950-1952, Part IV

By Joseph S. Bermudez Jr.

Reorganization, November 1950-January 1951

(Continued from last issue)

Following the CVA's *First Phase Campaign* the disorganized and depleted KPA commenced a reorganization and re-equipment program, part of which was centered around the cities of Sinŭiju in the northwest corner of the country, Kanggye in the center and Hoeryŏng in the east. In mid November the KPA GSD ordered the depleted 17th Tank Brigade to be detached from the I Corps and withdrawn to the Sinŭiju area {28} for re-equipment, reorganization and basic military training for new recruits and replacements.¹¹

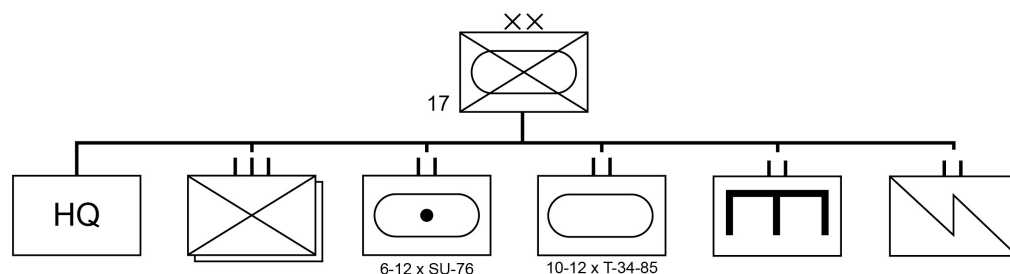
Here, having lost most of its equipment and personnel during the past six weeks, the unit was reorganized and designated the 17th Mechanized Brigade.¹² As part of this process the unit received replacement personnel in the form of new recruits and other replacements. The division was issued small quantities of tanks and artillery (likely equipment that had been damaged or abandoned and subsequently recovered and repaired). One prisoner-of-war claims that during this reorganization at Sinŭiju the division received 20 T-34-85 tanks, 10 BA-64 armored cars and a small number of 82 mm mortars.¹³

Combat Operations, January 1951- December 1951

During the middle of January 1951, following a short period of rest, the reconstituted 17th Mechanized Brigade was again attached to the I Corps.¹⁴ The corps followed in the wake of the Chinese *Second and Third Phase Campaigns* as CVA forces advanced south. Passing through P'yŏngyang {29}, the 17th Mechanized Brigade reached Seoul {30} in February and remained here through mid March serving as the I Corps mobile reserve.¹⁵

Sometime during this period the 17th was expanded and designated the 17th Mechanized Division.¹⁶ At this time the division was organized with a: headquarters, tank battalion (T-34-85), two "mechanized" infantry regiments, self-propelled artillery battalion (SU-76M), mortar battalion (120 mm M-1938), signals battalion and engineer battalion. Regardless of this reorganization the division possessed only 10-20 T-34-85 tanks and 6-12 SU-76M self-propelled guns and 30-40% of its trucks and heavy weapons.

In March the U.N.'s Operation RIPPER forced the I Corps, including the 17th Mechanized Division, out of Seoul and north of the Imjin-gang (i.e., Imjin River). At this time the division was transferred to the VI Corps, being replaced by the 19th Infantry Division. The mission of the VI Corps was the defense of Hwanghae-namdo (i.e., South Hwanghae Province), particularly coastal defense, as the GSD was concerned over a possible amphibious landing in its rear. In mid April 1951 the 17th Mechanized Division was located at Paekchŏn (approximately 22 km west of Kaesong) {31}, but subsequently moved north to the Anak-Sariwŏn area {32}. From here it could respond quickly to any amphibious assault in Hwanghae-namdo or coastal threat to P'yŏngyang. On about 6 July 1951, as part of a further reorganization and redeployment of frontline KPA forces, the 17th Mechanized Division was again transferred to the I Corps, replacing the 19th Infantry Division. The unit, however, did not move but remained in the Anak-Sariwŏn area.¹⁷ At this time the VI Corps began displacing to the eastern front.



17th Mechanized Division, January 1951

Copyright © 1995-2012, by Joseph S. Bermudez Jr.



At this time U.S. intelligence reports assessed the 17th Mechanized Division as being commanded by Major General Chong Chol-u and having a estimated troop strength of 6,600. The division was reported to have been organized into a: headquarters, three infantry regiments (possibly including the 33rd and 34th), artillery regiment, tank battalion and supporting units. It, however, remained understrength in T-34-85 tanks and SU-76M self-propelled guns having not received any significant replacement quantities since its previous reorganization in January.¹⁸

Beginning in late November 1951, additional organizational and disposition changes occurred within forward deployed KPA forces. Among these the I Corps was replaced by the CVA XXXX Army and redeployed from Hwanghae-namdo to the east coast, replacing the VI Corps. The 17th Mechanized Division, however, did not accompany the move.¹⁹

December 1951-1955

According to Russian sources the 17th Mechanized Division was disestablished in December 1951 and its equip-

ment transferred to the 105th Tank Division. U.S. intelligence reports, however, continued to carry the unit as active in reports as late as February 1952, when the 17th Mechanized Division is reported to have transferred a tank battalion to the 10th Mechanized Division. The 17th Mechanized Division disappears from any reporting at this point.²⁰ It is conceivable, however, that the 17th Mechanized Division was converted to the 17th Infantry Division as U.S. intelligence reports during 1953-1955 identify a 17th Infantry Division as an independent unit commanded by Major General Chong Chol-u.

Editor's Notes

Please don't be confused by the number and date (i.e., November 2012) of this issue. As mentioned in the previous issue, *KPA Journal* Volume 2, Numbers 11 and 12 (November and December 2012) were in the final stages of being assembled when I halted production in late-2012. Because they were almost completed, for consistency, I am simply finishing them with their original numbers and dates. I

hope to have Number 12 finished shortly. Following this, I intend begin publication of Volume 3 (2013).

With Volume 3 *KPA Journal* will receive an editorial and design makeover and switch to a different publication schedule. As part of these developments the journal will expand in size, open;y accept article submissions and initiate a peer-review system for submitted articles.

As always I continue to solicit your thoughts and suggestions on how to both improve *KPA Journal* and to tailor it more closely to your needs and interests, as well as those of the organizations you represent. Please feel free to contact me with any recommendations.

I would like to thank Katelyn Amen, Michael Madden, Dwight Rider, Cookie Sewell and Steven Zaloga for their continued assistance during the production of this issue.

Please feel free to share *KPA Journal* with your colleagues and friends. If you are a new reader and would like to be added to the *KPA Journal* mailing list please do so by sending me an email through the *Contact* feature on the website (www.kpajournal.com).

—Joseph S. Bermudez Jr

Endnotes

- ¹ Interview data acquired by Michael Madden; *Vantage Point*, Volume 12. Seoul: Naewoe Press, 1989, p. 17; *North Korea Handbook*. Armonk: M.E. Sharpe, 2003, p. 803; Choi, Eun-hee and Shin, Sang-ok. *Kidnapped to the Kingdom of Kim Jong Il*. Tokyo: Bungei Shunju, 1989; and "Biographic Information on 100 Officials," *Wolkan Kyonghyang*, January 1989. pp. 12-89.
- ² Michael Madden is the editor of *North Korean Leadership Watch*, <http://nkleadershipwatch.wordpress.com/>
- ³ Bill Streifer is a researcher and historian on the history of nuclear weapons and U.S. intelligence. His articles include a cover story in the *OSS Society Journal*, various articles for the *American Intelligence Journal*, DCBureau.org and others. *The Flight of the Hog Wild*, a book about the long history of nuclear activities in North Korea, co-authored with Irek Sabitov, a Russian journalist and newspaper editor, is in the works. Their website is: <http://TheFlightoftheHogWild.com>
Sang S. Nam, a resident of Seoul, is a Korean-Japanese-English translator. He translated Ms. Dong Chun-ok's interview from Japanese into English. He also drew the sketch of the Yŏngbyŏn Nuclear Research Center from public sources and from information derived from Ms. Dong's interview.
- ⁴ Dr. Kang Ho-je, a ROK authority on DPRK science and technology.
- ⁵ An admission they later denied.
- ⁶ See Weiss, Leonard. *The 1979 South Atlantic Flash: The Case for an Israeli Nuclear Test*, Stanford University, July 30, 2011.
- ⁷ Source is the now defunct website, <http://www.bekkoame.ne.jp/ro/renk>.
- ⁸ "Kim Jong-il Directs Nuclear Development," *Dong-A Ilbo*, July 17, 2002 and *Yonhap*, October 17, 2002.
- ⁹ Source is the now defunct website, <http://www.kimsoft.com/2002/nk-nuke4.htm>.
Born in Hamhung, northern Korea in 1935, Dr. Kim Young Sik emigrated to the United States in 1955 after serving with U.N. Forces during the Korean War. He earned his B.S. in Physics at Brigham Young University and his Ph.D. in High Energy Nuclear Physics from Purdue University in 1962. Dr. Kim was an Associate Professor of Physics at Ohio State University until 1980, after which he spent considerable time as a Visiting Scientist at the Argonne National Laboratory outside of Chicago. He also conducted additional research at the Brookhaven National Laboratory (Long Island, NY), CERN (Switzerland) and at Rutherford Laboratory (England).
- ¹⁰ In a message, dated October 20, 2002, from Kim Young-sik to Joseph S. Bermudez, Jr.
- ¹¹ *ATIS RS 106*, pp. 47-49.
- ¹² The use of the term "mechanized" infantry here is somewhat misleading. These units were primarily leg infantry to which a small number of trucks had been assigned. Volkovskiy, pp. 319-353.
- ¹³ *ATIS RS 106*, pp. 47-49 and Volkovskiy, pp. 319-353.
- ¹⁴ *ATIS RS 106*, pp. 47-49.
- ¹⁵ *OOB 8-51*, pp. 47 and 51 and Volkovskiy, pp. 246-249.
- ¹⁶ Volkovskiy, pp. 319-353.
- ¹⁷ *OOB 8-51*, pp. 47 and 51 and Volkovskiy, pp. 246-249.
- ¹⁸ *OOB 8-51*, pp. 47-49 and Volkovskiy, pp. 319-353.
- ¹⁹ GHQ, FEC, MIS, GS, *History of the North Korean Army*, 31 July 1952, pp. 39-40, 42 and 70 and Volkovskiy, pp. 319-353.
- ²⁰ *Ibid.* Throughout its existence, the 17th appears to have used the same "army unit" or code number of 122.