

JPRS-TND-91-008  
31 MAY 1991

Foreign  
Broadcast  
Information  
Service



A N N I V E R S A R Y  
1 9 4 1 - 1 9 9 1

# *JPRS Report*

# Nuclear Developments

19980506 131

DTIC QUALITY INSPECTED 3

REPRODUCED BY  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL TECHNICAL INFORMATION SERVICE  
SPRINGFIELD, VA. 22161

DISTRIBUTION STATEMENT A

Approved for public release;  
Distribution Unlimited

## **N O T I C E**

### **NUCLEAR DEVELOPMENTS REPORT TO BE RENAMED**

Beginning with JPRS-TND-91-010, the JPRS REPORT: NUCLEAR DEVELOPMENTS will be renamed JPRS REPORT: PROLIFERATION ISSUES. Its content will remain unchanged except that information on *ballistic missiles* and *biological weapons* will now appear in this report instead of the JPRS REPORT: ARMS CONTROL. This material will be included with other proliferation items under the appropriate geographic heading. Information on treaties governing the production, possession, and use of chemical and biological weapons will continue to appear under appropriate geographic headings in the ARMS CONTROL report.

Subscribers to the NUCLEAR DEVELOPMENTS report will experience no lapse in receipts when this change takes effect. Subscribers to the ARMS CONTROL report who wish to subscribe to the PROLIFERATION ISSUES report should consult the back cover for subscription information.

# NUCLEAR DEVELOPMENTS

JPRS-TND-91-008

## CONTENTS

31 May 1991

### CHINA

Algerian Nuclear Reactor .....	1
Foreign Ministry on Algerian Nuclear Reactor [ZHONGGUO XINWEN SHE] .....	1
Denies Weapons-Making Capability [XINHUA] .....	1
Further on Reactor [AFP] .....	1
Dumas Statement on Reactor Reported [Paris International] .....	2
Comments on Reactor .....	2
'Secret Report' Forecasts Increased Arms Exports [Hong Kong CHENG MING No 2] .....	2

### EAST ASIA

#### JAPAN

Government To Link ODA, Nuclear Treaty [KYODO] .....	4
--	---

#### NORTH KOREA

Daily Condemns U.S. Nuclear Inspection Stand [KCNA] .....	4
U.S. 'Nuclear Strike' Exercises in South Noted [KCNA] .....	5
Inspection of DPRK Nuclear Facilities Urged [Seoul YONHAP] .....	5
WPK's 'Anti-War, Anti-Nuke' Policy Viewed [KCNA] .....	6
Commentary Views Wolfowitz Remarks on Nuclear Inspection [Pyongyang Radio] .....	6
U.S.' Solarz Proposes Korea Nuclear-Free Zone [KCNA] .....	7
U.S.-USSR Talks on Nuclear Issue Reported [Pyongyang Radio] .....	7
Moscow Report on U.S. Nuclear Weapons Stand Noted [Pyongyang Radio] .....	7

#### SOUTH KOREA

DPRK's Advanced Weapons Analyzed [HANGUK ILBO 8 Feb] .....	7
'Secret' U.S.-Soviet Nuclear Weapons Talks Said Held [YONHAP] .....	9
North Korea's Nuclear Capability Analyzed [KYONGHYANG SINMUN 29 Apr] .....	10
U.S. 'Flexible Attitudes' on Nuclear Weapons Noted [YONHAP] .....	12
Official Opposes North-U.S. Nuclear Inspection Linkage [YONHAP] .....	13

#### TAIWAN

Poll Reveals Growing Support for Nuclear Power Plant [CNA] .....	13
Taipower May Not Build 5th Nuclear Power Plant [CNA] .....	13

### EAST EUROPE

#### BULGARIA

Post-Chernobyl Radiation Control Plan Described [DUMA 26 Apr] .....	15
Zhivkov Bodyguard Testifies at Chernobyl Trial [BTA] .....	15
Witness Questions IAEA's Chernobyl Assessment [BTA] .....	15

#### CZECHOSLOVAKIA

Inspectors List 104 Defects in Nuclear Plants [CTK] .....	16
---	----

## LATIN AMERICA

### ARGENTINA

Ministers Decide To Deactivate Missile Program .....	17
Defense Minister Holds Out [ <i>BUENOS AIRES HERALD 5 May</i> ] .....	17
President Menem Assures [ <i>TELAM</i> ] .....	17
Deactivation of Condor-2 Denied [ <i>BUENOS AIRES HERALD 6 May</i> ] .....	17
Signing of Missile Control Agreement Considered [ <i>LA PRENSA 5 May</i> ] .....	17
Peaceful Uses of Condor-2 To Continue [ <i>NOTICIAS ARGENTINAS</i> ] .....	18

### BRAZIL

Satellite Launch Vehicle Bidding Heats Up .....	18
U.S. Pressure Alleged [ <i>O ESTADO DE SAO PAULO 1 May</i> ] .....	18
Soviet Interest in Alcantara [ <i>O ESTADO DE SAO PAULO 1 May</i> ] .....	19
Political Decision [ <i>O ESTADO DE SAO PAULO 2 May</i> ] .....	20

## NEAR EAST/SOUTH ASIA

### ALGERIA

Sources Say Reactor Data To Be Released [ <i>London AL-SHARQ AL-AWSAT 1 May</i> ] .....	21
---	----

### INDIA

Fast Breeder Reactor Begins Operation [ <i>THE HINDU 24 Apr</i> ] .....	22
Leading Nuclear Scientist Roy Dies [ <i>PATRIOT 23 Apr</i> ] .....	22
Offer To Reprocess Spent Nuclear Fuel Reported [ <i>AFP</i> ] .....	22

### IRAN

Habibi Opens Nuclear Research Center in Karaj [ <i>Tehran Radio</i> ] .....	22
---	----

### IRAQ

Sudan Said Ready To Hold Iraq's Chemical Arms [ <i>London SAWT AL-KUWAYT AL-DUWALI 30 Apr</i> ] .....	23
Possession of Biological Weapons Said 'Probable' [ <i>Prague CTK</i> ] .....	23

### ISRAEL

Ne'eman on Plan for Local Power Plant [ <i>Jerusalem Radio</i> ] .....	23
Talks With USSR on Nuclear Desalination .....	23
500-Megawatt Facility [ <i>DAVAR 26 Apr</i> ] .....	23
Ne'eman Denies Talks [ <i>Jerusalem Radio</i> ] .....	24

### PAKISTAN

Editorial Questions U.S. Interests in Nuclear Issue [ <i>THE MUSLIM 5 May</i> ] .....	24
Letter to UN Chief Condemns Afghan Scud Attack [ <i>Islamabad Radio</i> ] .....	25
Sharif Says 'No Compromise' on Nuclear Program .....	25
Addresses Public Rally [ <i>Islamabad Radio</i> ] .....	25
President Rules Out Inspection [ <i>THE MUSLIM 29 Apr</i> ] .....	25
President Urges Regional Approach to Nonproliferation [ <i>Islamabad Radio</i> ] .....	25
President on Nuclear Weapons, Disarmament [ <i>THE MUSLIM 3 May</i> ] .....	25
French Envoy on Nuclear Power Plant Talks [ <i>THE MUSLIM 3 May</i> ] .....	26
Editorial Commends Sharif on Nuclear Issue [ <i>DAWN 5 May</i> ] .....	26
Bhutto: Nuclear Testing Would Isolate Country [ <i>AFP</i> ] .....	27
Measures To Safeguard Nuclear Installations [ <i>Islamabad Radio</i> ] .....	27

**SOVIET UNION**

Gremitskikh Views DPRK Nuclear Issues [TASS] .....	28
Issue of Hungary-Based Nuclear Arms Considered [Moscow Radio] .....	28
Commentator Assesses Nuclear Tension on Korean Peninsula [Moscow International] .....	28
Press Reports on Topaz Reactor Imbroglio [IZVESTIYA 7 May] .....	29
U.S. Nuclear Arms Withdrawal From ROK Viewed [Moscow International] .....	30
TASS Views Bush Statement on Chemical Arms .....	30

**WEST EUROPE**

**FINLAND**

Polls: Increasing Support for Nuclear Plants [HELSINGIN SANOMAT 24 Mar] .....	32
---	----

**GERMANY**

Genscher Welcomes Bush Call for Chemical Weapons Ban [ADN] .....	33
--	----

**SWEDEN**

Launch of Europe's Largest Rocket Fails [Stockholm Radio] .....	33
---	----

**INTERNATIONAL**

EC-Wide Arms Export Controls Proposed [Duesseldorf HANDELSBLATT 25 Mar] .....	34
---	----

## Algerian Nuclear Reactor

### Foreign Ministry on Algerian Nuclear Reactor

HK3004092891 Beijing ZHONGGUO XINWEN SHE  
in Chinese 0622 GMT 30 Apr 91

[Report: "A Chinese Foreign Ministry Spokesman Talked About the Nuclear Reactor in Algeria"—ZHONGGUO XINWEN SHE headline]

[Text] Beijing, 30 Apr (ZHONGGUO XINWEN SHE)—A Chinese Foreign Ministry spokesman today talked about the nuclear reactor in Algeria.

The spokesman said: 1. China and Algeria have nuclear cooperation which is utterly for peaceful purposes. In February 1983, China and Algeria signed an agreement on nuclear cooperation, whereby China agreed to provide Algeria with a heavy water reactor for study. This reactor's power is very small, with a rated power of 10 megawatts and maximum power of only 15 megawatts (15,000 kilowatts). Some Western publications said that this reactor could be used to manufacture nuclear weapons. This is utterly groundless.

2. In 1983, China was not an International Atomic Energy Agency [IAEA] member, therefore there was no such problem as asking the "agency" to exercise protective supervision. But we asked the Algerian Government to use it for peaceful purposes. The Algerian Government explicitly made such a commitment.

3. After China joined the IAEA in 1984, it took the "agency's" protective supervision as a condition for its nuclear exports. We have been informed that Algeria will report to the "agency" on Sino-Algerian nuclear cooperation and their discussions on problems concerning protective supervision to be submitted to the "agency."

4. China strictly abides by its nuclear nonproliferation policy in its nuclear exports. China does not advocate, does not encourage, and does not engage in nuclear proliferation, and it does not assist other countries in developing nuclear weapons. In its nuclear exports, China observes these three principles: Ensuring that nuclear exports are for peaceful purposes, submitting to the "agency" for protective supervision, and forbidding any transfer to a third country.

### Denies Weapons-Making Capability

OW3004120391 Beijing XINHUA in English  
1142 GMT 30 Apr 91

[Text] Beijing, April 30 (XINHUA)—The cooperation between China and Algeria in the nuclear field is entirely for peaceful purposes, a spokesman of the Chinese Foreign Ministry said here today.

Making remarks on the nuclear reactor in Algeria, the spokesman said that in February 1983, China and

Algeria signed a protocol on nuclear cooperation, in which China agreed to provide Algeria with a heavy water reactor for research.

The spokesman said the power of the reactor is very small, with a designed power of 10 megawatt and the maximum thermal power of 15 megawatt. It will be totally groundless to allege, as some Western media do, that the reactor can be used to make nuclear weapons, the spokesman added.

China was not a party in the International Atomic Energy Agency (IAEA) in 1983, the spokesman went on, so there was no such a question as submitting to IAEA safeguards or supervision.

However, he added, China asked the Algerian Government to pledge that the reactor be used only for peaceful purposes and the Algerian Government did make a clear promise to this effect.

Since China joined the IAEA in 1984, the spokesman noted, China has made acceptance of IAEA safeguards and supervision one of the preconditions for its nuclear export.

He stated that according to China's information, the Algerian side will brief the IAEA on the nuclear cooperation between China and Algeria and discuss with it the issue of submitting the reactor to IAEA safeguards and supervision.

China's nuclear export is strictly guided by its policy of nuclear non-proliferation, the spokesman said, adding China does not stand for, or encourage, or itself engage in nuclear proliferation, nor does it help other countries to develop nuclear weapons.

The spokesman explained there are three principles guiding China's nuclear export, namely, guarantee for peaceful use, submission to IAEA safeguards and supervision, and non-transfer to a third country.

### Further on Reactor

HK0105051091 Hong Kong AFP in English 0441 GMT  
1 May 91

[Text] Beijing, May 1 (AFP)—Algeria is not seeking to develop a nuclear weapon and has accepted China's request that it submit to standard controls, French Foreign Minister Roland Dumas cited Chinese officials Wednesday as saying.

Speaking at a news conference at the end of his three-day visit, Mr Dumas said he had been provided with "a number of details" about Sino-Algerian nuclear cooperation during his talks with China's leaders.

According to the London weekly THE OBSERVER, Beijing is helping Algeria develop a nuclear device.

"It is out of the question that Algeria is developing nuclear weapons," Mr Dumas quoted the Chinese leadership as having told him.

"Algeria has agreed to make public all information related to its cooperation with China" in the nuclear sector, he added.

The cooperation currently involves the development of a "research center of small capacity for purely civilian aims," he said.

Mr Dumas, who met Monday and Tuesday with his counterpart Qian Qichen and Premier Li Peng, left Beijing for the southern city of Guangzhou and was due to head on to Hong Kong.

### Dumas Statement on Reactor Reported

LD0105194691 *Paris International Service*  
in French 1830 GMT 1 May 91

[Text] The story of the Algerian nuclear reactor goes on. While officials in Algiers and Beijing are still stressing that the reactor being built in Algeria will only have a peaceful use, French Foreign Minister Roland Dumas now visiting China has been reassured by his Chinese colleagues. In the meantime our special correspondent (Caroline Fluel) inquired on the spot about the famous reactor:

[Fluel] It was in February 1983 that the Chinese signed an agreement with the Algerians to build a plant with a heavy water reactor. Today the construction is nearly finished. The reactor should have a maximum power of about 15 megawatts, which is not very significant on the nuclear level. Thus the explanation given by the Chinese to Roland Dumas, according to which it would be a research center for civilian use, would seem credible. So now the problem is no more seen in the light of strategic risks, the more so since the Algerians have agreed to submit [the plant] to IAEA controls.

On the other hand, the story calls in question the efficiency of the work of French intelligence services. The Chinese-Algerian plant is part of what Paris calls its security zone, but Roland Dumas stated that he learned about the existence of this nuclear research center only a few days ago, that is to say eight years after the beginning of cooperation between China and Algeria.

### Comments on Reactor

LD3004133491 *Paris International Service in French*  
1230 GMT 30 Apr 91

[Caroline Puelle report from Beijing]

[Text] The construction of a nuclear power station in Algeria is being followed very closely by the rest of the world. Roland Dumas, the French minister of foreign affairs, who is visiting Beijing, reacted this morning. I remind you that China is helping Algeria with this project, Roland Dumas:

[Begin Dumas recording] China is a nuclear power, like France. Like France, China has not signed the Nonproliferation Treaty. However, France applies the spirit and the letter of this treaty with much caution and care. I thus posed the question in those terms to Chinese officials, who pointed out to me that the Chinese leaders had indeed concluded an agreement with the Algerian leaders, and that this conformed in all respects with international regulations. I think that by tomorrow I will have some extra details, which I have requested. If this is the case I will communicate them to you during my news conference. [end recording]

### 'Secret Report' Forecasts Increased Arms Exports

91CM0278A *Hong Kong CHENG MING*  
[CONTENDING] in Chinese No 2, 1 Feb 91 p 18

[Article by special correspondent Tso Ni (1563 6627): "New Chinese Communist Target—Great Arms Exporting Nation; Secret Military Commission Report Targets Analysis, Research on Arms Upgrading by China's Main Neighbors and the Region"]

### [Text] Secret Report of High-Level Military Research Group

On New Year's Eve the Central Military Commission approved plans for 1991 arms exports.

The Chinese Communists carefully analyzed the international and Asian-Pacific region situation after the U.S.-Soviet reconciliation and decided to export arms actively as a "long-range strategic target," especially to neighboring countries and regions. They believe that exporting arms not only has major economic significance, but also has major political and strategic significance. The Central Military Commission stated that they should seize the opportune moment and quickly open avenues for arms exports. A high-level military research group provided the Central Military Commission with a secret report that targeted analysis and research on the arms-upgrading situation among China's primary neighbors and regions, especially India, Indonesia, Thailand, Malaysia, Pakistan, and Laos. The secret military report said that China's conventional tactical weapons are comparable to those of the Western powers qualitatively and quantitatively. Exports of conventional weapons may open even greater outlets in the international market.

### Yang Shangkun Boldly Directs Arms Exporting

On New Year's Eve, at the same time as the Seventh Plenary Session of the 13th CPC Central Committee, the Central Military Commission also convened a special meeting to study arms exporting. Yang Shangkun spoke at the meeting. The essence was that, in the past 10 years, the Soviet Union and the Western countries, especially the United States, England, and France, have exported a large amount of weapons. We pale by comparison. In the

Eighth Five-year Plan we should concentrate our manpower, materiel, and finances on research and development of new weapons and equipment partly to equip ourselves, but also to export. "The United States, England, and the Soviet Union rely on selling arms to earn money, if they can do it, why can't we?" Yang said. "Someone has calculated that one heavy tank can be exchanged for 286 tons of beef." Yang also said that we will not engage in this secretly but from now on should engage in arms production and export boldly and with assurance. The Central Committee has already approved it, so we should set up a specialized group to do this.

#### **Plan To Become Major Arms Exporter in Three to Five Years**

The Military Commission demands that China become a major arms exporter in the next three to five years. While doing this, we should more actively upgrade our own military's equipment. The Central Committee believes that there will not be a large-scale war in the Asian-Pacific region in the next three to five years so we should seize this opportunity to engage in military research and development. When Yang Shangkun discussed this issue at an important meeting of the Military Commission convened on New Year's Eve, he said, "A few days ago I participated in a study group discussion and some comrades asked me, 'since the Sino-Soviet border region has been disarmed and the Sino-Vietnamese and Sino-India borders were also at peace, how can weapons education

for our Army be improved in the future?' I told them that it was fine that the Sino-Soviet border was disarmed and that the Sino-Vietnamese border was at peace, but we definitely could not waver and weaken military weapons education and military training. The desire of imperialism and the Western powers for our demise is still alive and as long as we uphold socialism they will constantly attempt to overturn and destroy us. We will always face the problem of anticommunist encirclement."

Yang Shangkun stressed the importance of military research and development. He said, "Our Army has several decades of abundant experience in long-term land warfare, but long-distance war is a new topic." "This is a main direction of attack." "For the next few years our major efforts should be directed towards military research and development." "We should have comprehensive overall plans, including submarines, warships, airborne, landing operations, and long-range bombing and rear unit reinforcement..." Yang also said, "All of this may not be needed but if we don't study it we can't do it and if we are not prepared we can't do it. If we don't study it, they will. If we don't prepare, they will. How will that do?"

It was revealed that expenses for military scientific research have increased substantially for the Eighth Five-year Plan, including research expenses for the Navy and Air Force, much beyond those of the past several five-year plans.



## JAPAN

### Government To Link ODA, Nuclear Treaty

*OW0905150591 Tokyo KYODO in English 1421 GMT  
9 May 91*

[Text] Tokyo, May 9 KYODO—Japan's economic assistance to developing countries yet to sign the nuclear non-proliferation treaty will depend on the degree of such nations' efforts toward signing the international accord, government sources said Thursday.

The sources said the government has outlined its policy concerning Japan's Official Development Assistance (ODA), with the aim of prodding nonmember countries toward accepting a policy of nuclear nonproliferation.

There are 142 nations which have so far signed the treaty, including North Korea. Among nonmember nations are India, Pakistan, Israel, Brazil, and Argentina, as well as France and China, both acknowledged nuclear powers.

Prime Minister Toshiki Kaifu told the Diet in April that Japan will be more cautious against moves by non-member nations to produce nuclear weapons.

Japan will soon inform Pakistan of its policy at a meeting of a joint committee of the two countries which started Thursday in Tokyo, the sources said.

Japan pledged 2,685 million dollars in aid to Pakistan for 1989- 1990, according to official Pakistani figures.

The United States suspended its military and economic assistance to Pakistan last October because of Islamabad's nuclear program.

## NORTH KOREA

### Daily Condemns U.S. Nuclear Inspection Stand

*SK0205113491 Pyongyang KCNA in English  
1018 GMT 2 May 91*

["Who Is Violating Nuclear Nonproliferation Treaty ?"—KCNA headline]

[Text] Pyongyang May 2 (KCNA)—The Nuclear Non-proliferation Treaty [NPT] does not give the United States the rights to force all manner of humiliation upon nonnuclear nations and fool with their vital rights, says NODONG SINMUN in a bylined article today.

If the U.S. authorities truly want to have the nuclear threat removed from the Korean peninsula, they, instead of taking issue with us who have no nuclear weapons and do not develop such kind of weapons, must above all remove the elements of nuclear threat to us, make security commitments, stop nuclear military exercises in South Korea and take steps to withdraw their nuclear weapons, notes the article.

The U.S. imperialists, through international conferences, press interviews and subsidized publications, are now spreading lies that we have refused to sign a nuclear safeguards accord and are developing nuclear weapons. Further, they are inveigling the South Korean authorities and other stooges of theirs and some other countries into this anti-DPRK campaign, the article says, and continues:

In his recent answers to the questions raised by the managing editor of the Japanese newspaper MAINICHI SHIMBUN, the great leader Comrade Kim Il-song said:

"It is unreasonable for the United States to fuss about the nuclear inspection of somebody else while they themselves have made South Korea a most dangerous nuclear base and are threatening us."

The U.S. imperialists' taking issue with us over the nuclear inspection problem is a brazen act reminding us of a thief crying "stop thief!" This reckless row of theirs is a base trick to mar the international prestige and dignity of our Republic and isolate us internationally and a crafty scheme to cover up their true color in posing a direct nuclear threat to us and divert elsewhere home and foreign public opinion.

Our Republic, regarding it as its noble mission and responsibility to the time and history to prevent a nuclear war and save mankind from nuclear threat, has not only steadfastly opposed the test, production, stockpile and use of nuclear weapons but also strongly demanded a comprehensive and complete elimination of all the nuclear weapons. It joined the Nuclear Nonproliferation Treaty with a view to removing the nuclear threat to our people and turning the Korean peninsula into a nuke-free zone, and has made strenuous efforts to, first of all, dispel the danger of a nuclear war and ensure a durable peace on the Korean peninsula in conformity with the idea of this Treaty.

As the denuclearization of the Korean peninsula has become an urgent demand which should be met immediately, we have repeatedly proposed to the U.S. authorities to have talks for an early settlement of this question.

It is because the United States has not honestly discharged its obligation under the Nonproliferation Treaty that none of our anti-nuke peace overtures have been realized and the danger of nuclear war is increasing on the Korean peninsula.

It is stipulated in the Nonproliferation Treaty that the states with nuclear weapons should not threaten other nations with these weapons or use nuclear weapons but should refrain from creating an emergency state endangering the fundamental interests of nonnuclear states, make every effort possible to avert nuclear war and take measures to defend the security of the people.

Contrary to this demand of the treaty, the U.S. imperialists have deployed more than 1,000 pieces of nuclear weapons in South Korea, turned it into the largest

nuclear forward base in the Far East and the most dangerous source of nuclear war and increased nuclear threat to us with nuclear war exercises including the "Team Spirit" joint military maneuvers.

It is also stipulated in the Nonproliferation Treaty that the states with nuclear weapons should endeavour to realise universal and complete disarmament and stop the test of nuclear weapons, assume the obligation to establish nuclear-free zones, ban the proliferation of nuclear weapons, dismantle and abolish nuclear weapons.

But, the United States, behind the facade of nuclear disarmament negotiation, is continuing underground nuclear tests, developing new-type nuclear weapons, constantly enlarging the nuclear arsenals and openly engaging itself in qualitative improvement and quantitative increase of nuclear weapons, vertical proliferation of nuclear weapons such as deployment of nuclear weapons in other areas, while doggedly opposing the denuclearisation of the Korean peninsula and other parts of the world.

As for the signing of the nuclear safeguards accord, we have never refused it but are willing to sign it as soon as possible. We and the international atomic energy agency have reached an agreement on it in the main. It is because the United States has not created necessary climate and conditions that we have not yet signed it.

As is recognized by international law, the signing of an accord is a matter belonging to the independent rights of a sovereign state. It is self-evident that no one can sign the nuclear safeguards accord, conniving at the practical nuclear threat to himself and leaving the sovereignty of the country and vital rights of the nation exposed to danger, even if it is required by the NPT.

We would like to ask the Americans what they would do if any country had bisected the United States into North and South or into East and West, deployed nuclear weapons and its troops in one part and posed nuclear threat to the other. We also would like to ask the same question to those countries which raise the nuclear inspection problem to us in collusion with the United States.

It is our legitimate right to urge the United States to remove nuclear threat to us and commit itself to guarantee our security. And it is an obligation of the United States to meet our demand as a nuclear state.

Nuclear inspection is a matter to be done under the nuclear safeguards accord after it is signed by us and the international atomic energy agency. If the United States wants inspection on our nuclear facilities, it must allow simultaneous inspection on its nuclear weapons and nuclear facilities in South Korea.

For the United States to force some sort of implementation on nonnuclear states while failing to discharge its obligation under the NPT is an arrogant act and does not accord with the principle of impartiality recognised by

international law. Even if the United States arbitrarily acts, slandering us, it can never go down with anyone.

The South Korean authorities must stop playing the shameful role of a marionette, ridiculously slandering us with the nuclear inspection problem on the script of their master, U.S. imperialism.

### **U.S. 'Nuclear Strike' Exercises in South Noted**

*SK0205060791 Pyongyang KCNA in English  
0507 GMT 2 May 91*

[Text] Pyongyang May 2 (KCNA)—The U.S. Pacific Airforce Command sent formations of overseas-based F-15 and F-16 fighter-bombers and formations of F-16 fighter bombers of the U.S. 7th Airforce stationed in South Korea to the skies above Kongju, Yongdong, Oeyon Islet, Yaju and Sangju of South Korea on April 30 to stage an aerial nuclear strike exercise for a preemptive attack on the targets in the strategical depths of the northern half of the country, according to military sources.

And Guam-based KC-135 refuelling tankers in the sky above Oeyon Islet conducted an exercise of mid-air refuelling to formations of F-16 fighter-bombers and OA-10 observation planes of the U.S. Airforce present in South Korea.

On the same day, the U.S. imperialists and the South Korean puppets let U-2, RC-12, RV-1 and RF-4 high-altitude strategical reconnaissance planes and army tactical reconnaissance planes fly above the Military Demarcation Line on 24 occasions for an aerial espionage and photographing.

At the same time, the South Korean puppets frantically staged a ground attack operation in the Kapyong area and an attack operation in the sea off Inchon under the support of fighter-bombers.

The military planes which flew above South Korea that day numbered more than 560.

### **Inspection of DPRK Nuclear Facilities Urged**

*SK0305015891 Seoul YONHAP in English 0143 GMT  
3 May 91*

[Text] Pyongyang, North Korea, May 3 (YONHAP)—A subcommittee of the Inter-Parliamentary Union (IPU), meeting in Pyongyang, Thursday called on North Korea to open its nuclear facilities to international inspection.

In a resolution targeted at North Korea, the subcommittee to adopt a draft resolution on nuclear and arms control said any nation that is a member of the International Atomic Energy Agency (IAEA) should unconditionally sign the IAEA Nuclear Safeguards Accord.

After grueling debate, the 13-member panel adopted a resolution based primarily on drafts of Switzerland,

Britain and Morocco. South Korea has insisted that North Korean nuclear facilities should be open to international inspection.

### WPK's 'Anti-War, Anti-Nuke' Policy Viewed

SK0805111391 *Pyongyang KCNA in English*  
1015 GMT 8 May 91

[“Anti-War, Anti-Nuke Peace Is Our Party’s Consistent Position”—KCNA headline]

[Text] *Pyongyang May 8 (KCNA)*—Anti-war, anti-nuke peace is the unshakable position of the Workers’ Party of Korea [WPK] and the fundamental principle of its foreign policy, declares NODONG SINMUN in a signed article today.

It says:

The current of the international situation more clearly proves the justness of our party’s anti-war, anti-nuke peace policy.

Our party’s anti-war, anti-nuke peace policy is run through with the idea of averting a nuclear war and defending peace through struggle.

In order to avert a nuclear war and preserve peace, the world people must firmly unite and vigorously wage the anti-war, anti-nuke struggle.

The peaceloving people throughout the world must not be taken in by the deceptive propaganda of the imperialists about “detente,” “disarmament” and “peace” but continue to vigorously wage the anti-war, anti-nuke peace struggle with concerted efforts and resolutely check and foil the imperialists’ nuclear arms buildup and nuclear war provocation moves.

Our party clearly laid down the policy and ways of averting a nuclear war through struggle.

Our party consistently maintains that the test, production and deployment of nuclear weapons must be prohibited, the existing nuclear weapons be reduced, furthermore, all the nuclear weapons be destroyed totally, nuclear-free, peace zones be established in different parts and gradually expanded throughout the world.

Our party set it as the primary task to prevent a nuclear war and preserve a durable peace on the Korean peninsula, made many peace overtures including the proposal for converting the Korean peninsula into a nuclear-free, peace zone and repeatedly urged the United States to show a constructive response.

When the Korean peninsula is turned into a nuclear-free, peace zone, one of the most dangerous hotbeds of nuclear war in the world will be removed and a great progress be made in preserving peace in Asia and the rest of the world.

### Commentary Views Wolfowitz Remarks on Nuclear Inspection

SK1305092391 *Pyongyang Korean Central Broadcasting Network in Korean* 0024 GMT 13 May 91

[NODONG SINMUN 13 May commentary: “Coercive Remarks on Nuclear Threat by the Aggressors”]

[Text] It has been reported that U.S. Undersecretary of Defense Wolfowitz groundlessly slandered and defamed our Republic during a discussion in Tokyo on 10 May. He said that North Korea’s moves are the most serious threat in the Asian-Pacific region. He also said, carelessly, that we were carrying out nuclear development. This is not true. This is also an unreasonable act reversing black and white.

The false statement by Wolfowitz is part of a cunning trick designed to make us, who have no nuclear weapons, the focus of public attention by describing us as one who commits violations, and to conceal their maneuvers to expand nuclear armaments and to provoke a nuclear war. This only shows the U.S. imperialists’ brigandish nature.

Our position on nuclear weapons is that we do not feel that it is necessary to possess such weapons of mass murder. Resolutely opposing the test, production, storage, and use of nuclear weapons and abolishing all the nuclear weapons is our Republic’s consistent demand. Based upon this position, we have declared many times that we have no intention or capability to develop nuclear weapons. We also advanced a proposal to turn the Korean peninsula into a nuclear-free zone and have made every effort to realize this proposal.

Our Republic, the signatory of the Nonproliferation Treaty [NPT], is ready to sign the nuclear safeguards agreement with the International Atomic Energy Agency. However, we have not been able to sign this agreement because the United States has neither legally guaranteed nuclear safety nor taken practical measures to remove nuclear threats. In violation of the NPT, the United States has systematically increased the danger of nuclear war.

The U.S. imperialists, who have turned South Korea into the largest nuclear weapons storage facility in the Far East and into the front line region of antisocialist strategies, has conducted the Team Spirit exercise, a nuclear war exercise designed to invade the North. This year, too, it is fervently conducting an exercise for northward invasion in the skies over South Korea after mobilizing hundreds of airplanes, including nuclear attack planes, almost daily for months.

The fierce actual war exercise which the U.S. imperialists are conducting day and night in South Korea, where approximately 1,000 nuclear weapons and ultramodern war devices are concentrated, is a very dangerous adventure like a fire play on top of a time bomb. If sparks of

war shoot up in South Korea, neither the Korean peninsula nor Asia or the world in general will be safe. As reality shows, the most serious danger of war in the Asian-Pacific region is being created in South Korea, and this is caused by the U.S. occupation of South Korea and its policy of war.

It is the United States that has created the danger of war. Trying to pass the blame for the danger of war to someone else even though it has created the danger of war is the chronic habit of the U.S. imperialists, the most shameless and arrogant aggressors.

The U.S. ruling circles have loudly talked about our nonexistent nuclear facilities. They have done so mainly to avoid withdrawing U.S. troops and nuclear weapons from South Korea.

Today, when the nuclear arms reduction, detente, and the removal of foreign troops have become the trend of the times, the voices of the world's people who demand that the arms reduction be achieved in the Asian-Pacific region and that, in particular, U.S. troops and nuclear weapons be withdrawn from South Korea are growing daily. The United States, which can no longer turn a blind ear to this demand, has made an issue of nuclear inspection in our Republic, thus promoting tension. Using this inspection as an excuse, it is trying to continuously station U.S. troops and nuclear weapons in South Korea and to carry out its aggressive strategies toward the Asian-Pacific region.

Wolfowitz appeared in Tokyo and groundlessly talked about our Republic's nuclear development. We can easily know that he did so to build an artificial obstacle to the DPRK-Japanese talks for the normalization of diplomatic relations and put a brake on the negotiations, a cunning scheme.

We have no nuclear weapons and are constantly under nuclear threats. However, the United States makes it its business to spread falsehoods, while talking about nuclear development. This is a threat and blackmail by the aggressors who have an intense ambition for nuclear war. Instead of adhering to falsehoods and nuclear war maneuvers that threaten peace, the United States must leave South Korea along with its nuclear weapons and troops and take its interfering hands off Korea.

### **U.S.' Solarz Proposes Korea Nuclear-Free Zone**

*SK1405054991 Pyongyang KCNA in English  
0430 GMT 14 May 91*

[Text] Pyongyang May 14 (KCNA)—Solarz, chairman of the House of Representatives Subcommittee on Asian and Pacific Affairs, proposed making the Korean peninsula a nuclear-free zone, according to a report from Washington.

He recently told this to a delegation from Japan's Democratic Socialist Party on a visit to the United States, reported KYODO.

### **U.S.-USSR Talks on Nuclear Issue Reported**

*SK1405034491 Pyongyang Korean Central  
Broadcasting Network in Korean 2200 GMT 14 May 91*

[Text] In its 2 May issue, the Japanese daily NIHON KEIZAI SHIMBUN reported that the United States and the Soviet Union are engaged in secret negotiations over the question of our country signing the nuclear safeguards accord and withdrawing U.S. nuclear weapons from South Korea.

Saying that the secret negotiations between the United States and the Soviet Union over this issue had been revealed on 1 May, the Japanese daily quoted a Japanese Government official as saying that if U.S.-Soviet negotiations make headway, the possibility exists of the United States and Korea starting direct negotiations over the question of nuclear inspection and withdrawing U.S. nuclear weapons stockpiled in South Korea.

Foreign news agencies also reported on the rumored secret negotiations between the United States and the Soviet Union.

### **Moscow Report on U.S. Nuclear Weapons Stand Noted**

*SK1605021391 Pyongyang Korean Central  
Broadcasting Network in Korean 2100 GMT 14 May 91*

[Text] On 11 May, Moscow radio reported on South Korea's CHUNGANG ILBO report that the United States is examining the possibility of withdrawing its nuclear weapons from South Korea.

Moscow radio reported that this report, which is related to the issue of withdrawing U.S. nuclear weapons from South Korea, is arousing great interest, and continued to say that the United States must drastically reduce the U.S. forces stationed in South Korea and that the United States must take responsible measures to withdraw its nuclear weapons from South Korea in the near future.

## **SOUTH KOREA**

### **DPRK's Advanced Weapons Analyzed**

*912C0149A Seoul HANGUK ILBO in Korean  
8 Feb 91 p 8*

[Article by Nam Yong-chin]

[Text] It is noteworthy that Iraq's Scud-B ground-to-ground missiles and chemical weapons, which have been generating much fear in the Gulf war, are also being developed in North Korea and are being deployed for real warfare.

According to a government authority who confirmed the status of North Korea's missile deployment and military equipment on 2 February, North Korea has produced about 50 Scud-B missiles per year since 1987 and has set

up 12 launch pads within 40-50 kilometers north of the truce line, setting the entire South Korean region within the target range.

In addition, U.S. military analysts say that North Korea has produced chemical weapons in eight areas since early 1980 and has stored more than 250 tons of chemical weapons in the front tunnels.

Let us take a look at North Korea's high-tech missiles, chemical weapons, tanks, and fighters.

**Missiles:** Like the ones in Iraq, the missiles in North Korea were reportedly imported from the Soviet Union and have been modified. North Korea is known to possess not only the Scud-B missiles, which are ground-to-ground missiles, but also 800 ground-to-air missiles, including the SA-3, SA-5 and SA-7, which have proven powerful in the Gulf war, and 8,000 anti-aircraft guns.

**The Scud-B Ground-to-Ground Missile:** In 1983, North Korea imported Soviet made Scud missiles from Egypt and began to develop its own model. From 1984 to 1986, North Korea conducted a series of test firings in the Sea of Japan and then developed its own type of Scud-B missile.

Since 1987, North Korea commenced mass production [of the missile] in a plant near Pyongyang, which produces about 50 units per year. This missile is 11.5 meters long and 85 centimeters in diameter. Because its target range is nearly 300 kilometers, the areas north of Kunsan, North Cholla Province and north of Yongdok, North Kyongsang Province fall within its range. It weighs about 900 kilograms and is capable of carrying nuclear and chemical warheads. Its power is similar to the Soviet missiles; but because its launch pad is movable like Iraq's, it is difficult to detect and attack. Also, because its target error is 450-900 meters, it could inflict much damage on civilians when military facilities are targeted in a densely populated area like Seoul.

**The Modified Scud Missile:** Since 1988, North Korea has been developing a modified version of the Scud missile, which is expected to be manufactured and deployed sometime in 1992.

This new missile is approximately 15.1 meters long and 130 centimeters in diameter, and because its target range is some 600 kilometers, the entire South Korean region falls within its range even if it is launched from north of the truce line.

U.S. intelligence agencies have confirmed loading of missiles at a military testing site north of Pyongyang in May last year, and also confirmed that North Korea was preparing a test firing in a coastal region of North Hamkyong Province.

**The SA-5 Ground-to-Air Missile:** North Korea has imported 30 some units of this missile from the Soviet Union since 1987. With an ascending altitude of 300 meters to 30 kilometers and a target range of 300 kilometers, this is the newest and most powerful missile

for strategic defense, which could pose a serious threat to the activities of our aircraft in the north of the Kunsan-Yongdok line.

**The SA-7 Ground-to-Air Missile:** Whereas the SA-5 missile requires a launch base, the SA-7 missile is a portable missile and is used to attack low-altitude, low-speed aircraft.

It was first imported in 1974 from the Soviet Union, and since 1979 North Korea has been producing about 100 units per year at an ordnance factory in Chongjin. Its target range is five kilometers and its maximum speed is mach 1.5; but its accuracy is outstanding because it is guided by infrared rays.

**Status of Deployment:** Government authorities have confirmed that North Korea has actually deployed 12 units of a movable missile-launch pad in areas 40-50 kilometers north of the truce line. According to the "Summary of Strategies in the Asian-Pacific Region for the 21st Century," presented by the U.S. Department of Defense last year, there are nearly 54 units of the ground-to-ground missile launch pad, including both the fixed and movable types.

The U.S. WASHINGTON TIMES, too, confirmed in June last year that North Korea was in the process of building two launch pads in the demilitarized zone for missiles that can be equipped with nuclear warheads.

In addition, there are 50 ground-to-air missile bases, including the SA-5 and SA-7 missiles, spread all over the nation. In the case of the SA-5, North Korea deployed 12 units near Sariwon at the end of 1989, and additional bases are presently under construction in the areas occupied heavily by airports and military facilities, such as Wonsan, Kangwon Province.

North Korea has already completed deployment of the SA-7 missiles at special units and front units. Last year, American newspapers reported that while building two units of the Scud-B missile launch pads in the demilitarized zone, North Korea surrounded the launch pads with the SA-5 launch pads to guard against attacks from outside, and said that surveillance radars were in operation.

**Chemical Weapons:** North Korea has been producing chemical, biological and radiological weapons since early 1960's, and is ranked the third after the United States and the Soviet Union as a country in possession of chemical weapons.

**Type:** At present, North Korea has many different kinds of chemical weapons, including chloric hydrocyanic acid (blood-disorder type), phosgene (asphyxiating gas), adamsite (nausea-producing gas), and mustard gas (blister-producing gas), as well as tabun which causes nerve paralysis.

**Research and Production:** Under Kim Il-song's orders in November 1980, North Korea has reportedly conducted research and development at three research institutions,

namely, the Institute of Microbiological Diseases at the Academy of Medical Science, Medical Research Institute at the Academy of National Defense Sciences, and the "No. 25 Factory," and has reportedly completed experiments on "anti-government elements."

North Korea is presently producing about 14 tons of biological and chemical weapons per year in eight areas, including Aochi, Chongjin, Hamhung, and Sinuiju.

**Deployment:** In order to minimize the time to transport these weapons to the front and combat zones in time of emergency, North Korea has reportedly stored them in six different areas, including Sanumri in South Pyongan Province, Hwangchon in North Hwanghae Province, Sariwon near the truce line, and Wangchaebong near the center of the front line. An American military analyst said in early 1989, "North Korea has deployed 1.8 million tons of chemical weapons in 170 some tunnels in the front."

North Korea has reportedly formed chemical platoons within the regimental level and is reportedly conducting training for chemical and biological weapons attack.

**The MiG-29 Fighter:** North Korea is reportedly in possession of 1,600 some aircraft, including about 750 fighters, 80 some bombers (IL-28), 300 some transport planes, and 280 some helicopters.

Of these, the Soviet made MiG-29 plane is the newest and most powerful fighter, which the Soviet Union deployed for itself in 1985. North Korea reportedly imported about 25 MiG-29 fighters in early 1988.

Because it is equipped with the newest electronic equipment, such as an infrared detection system and a radar distance determination system, it is superior in night fighting and is somewhat faster than our main fighter F-16.

**Ability To Attack:** Because North Korea has deployed 40 percent of its fighters at the advance air bases, it is able to launch an immediate offensive over the entire region of South Korea. While the MiG-15, MiG-17 and MiG-19 fighters can attack the national capital region and the northern area, the MiG-21, MiG-23, SU-7, and SU-25 planes can attack the central and southern areas at once.

However, because the MiG-29 fighter can fly up to 1,100 miles, it can attack not only the main land of South Korea but also Cheju Island and Okinawa without refueling after it takes off from the truce line.

**The Air Force System and Deployment:** Under the Air Force Command in Chunghwa, the North Korean Air Force has three air commands in Kaecheon (North Pyongan Province), Toksan (South Hamkyong Province) and Hwangchu (Hwanghae Province) in addition to the 8th Air Division in Orang, North Hamkyong Province.

North Korea has built a total of 70 some air bases, including jet bases, non-jet bases and emergency runways, of which 20 some bases have underground hangars and are presently housing various aircraft.

In particular, North Korea has deployed 40 percent of its jet fighters in the forward position in four areas near the truce line, such as Taenan and Nucholli in Hwanghae Province and Ku-ummi and Hyolli in Kangwon Province. Thus, these jet fighters are fully prepared for an immediate take-off toward the entire region of South Korea.

While establishing the three war commands, North Korea relocated aircraft, giving each command an individual strategic power, and established a system of independent strategies based on regimental functions of fighters, bombers, transporters, helicopters, missiles, and detectors.

**The T-72 Tank:** It is reported that North Korea has recently begun to produce tanks modeled after the Soviet made T-72 tank. The T-72 tank made its entry into the Gulf war as one of Iraq's newest and most powerful weapons, and is challenging the M-1A1 tank of the U.S. Armed Forces.

**Capability:** Equipped with a 125-millimeter gun and a maximum speed of 80 kilometers per hour, the T-72 tank is superior to the M-1A1 tank which has a 120-millimeter gun and a maximum speed of 72 kilometers per hour. In addition, it is equipped with an infrared vision system, automatic charging system, obstacle removal system, and even a submerging system for river crossing, all of which make it powerful in night fighting. Its only weakness is that it does not stand well against the American TOW missile and the 105-millimeter tank-gun.

**Tank and Mechanized Units:** North Korea has not yet deployed the T-72 tank for real warfare, and its main force is the T-62 tank. It is estimated that North Korea has about 3,500 tanks, 1,960 armored cars including the M-1983 armored cars designed for combat, 9,000 field-guns, and 7,200 rocket guns.

It is reported that for the last several years North Korea has reorganized its mechanized and tank divisions into 15 mechanized brigades suitable for the Korean topography, and that it has created armored corps, mechanized corps, and self-propelled artillery corps, thereby establishing a command system for modern warfare.

#### **'Secret' U.S.-Soviet Nuclear Weapons Talks Said Held**

SK0205045091 Seoul YONHAP in English 0419 GMT  
2 May 91

[Text] Tokyo, May 2 (OANA-YONHAP)—The United States and the Soviet Union are having secret talks on removing U.S. nuclear weapons from South Korea to prevent a nuclear buildup in North Korea, the Japanese daily NIHON KEIZAI reported Thursday.

High-ranking diplomatic and defense officials of the two superpowers have met several times for the talks since Spring 1990 and direct contact between the United States and North Korea may be realized with the Soviet Union sitting in if progress is made in the U.S.-Soviet encounter, the paper said.

The officials met at least twice last fall, followed by another meeting this year, the daily reported.

Quoting a well-informed Japanese Government source, it said the two countries initiated the talks because of the increasing possibility that Pyongyang can develop nuclear weapons within the next two or three years.

If nothing were done, the Soviet Union and China, North Korea's staunch allies, would dramatically lose military leverage over president Kim Il-song and South Korea might develop its own nuclear arsenal to match North Korea's, the paper said.

The superpowers agree Pyongyang may lose its current stability under Kim once the 79-year-old president dies and fear the subsequent political confusion might touch off a volatile confrontation on the Korean peninsula, NIHON KEIZAI said.

The Japanese Defense Agency predicts North Korea's nuclear facilities in Yongbyon, some 90 kilometers north of Pyongyang, will be capable of producing enough plutonium to make one atomic bomb by late 1993 and a dramatic increase in production capacity is possible by late 1994 at the latest.

The agency believes the United States has approximately 1,000 small, tactical nuclear weapons in South Korea, according to the daily.

There are 43,000 U.S. troops stationed in South Korea.

North Korea signed the nuclear non-proliferation treaty in 1985 but is yet to sign the nuclear safeguards accord and open its nuclear facilities to international inspection.

Pyongyang stands firm in its claim that it is not aiming at production of nuclear bombs, and says the United States must withdraw its arsenal from the South before enforcing international inspections.

Moscow-Washington negotiations are based on post-cold war developments, including gradual reduction of U.S. military bases overseas, but China and the United States also share common fears about North Korea's nuclear buildup.

Chinese Premier Li Peng, in a recent meeting with Japanese Foreign Minister Taro Nakayama, explicitly said he was hoping against any military confrontation on the Korean peninsula.

The chances of North Korea signing the safeguards accord are uncertain even if U.S. troops remove their

nuclear weapons from South Korea, the paper said, since the United States will still have a naval nuclear capability.

It is questionable whether Washington can guarantee that it won't use nuclear weapons, the paper added.

**North Korea's Nuclear Capability Analyzed**  
*SK0405141991 Seoul KYONGHYANG SINMUN*  
*in Korean 29 Apr 91 p 13*

[Interview with Dr Chong Kun-mo, chairman (1989-90) of the International Atomic Energy Agency, IAEA, and Minister of Science and Technology, by Kang Sin-ku, deputy editor in chief of KYONGHYANG SINMUN—place and date not given; first graf is editor's notation]

[Text] As was discussed at the recent ROK-USSR summit talks, North Korea's refusal to allow an international inspection of its nuclear facilities has become a pressing issue not only for peace on the Korean peninsula, but also for peace in the world. Is North Korea really developing nuclear weapons? If so, to what extent has it developed nuclear technology? Deputy editor in chief Kang Sin-ku interviewed Dr. Chong Kun-mo, a nuclear physicist who served as chairman of the IAEA [International Atomic Energy Agency] General Conference during the 1989-90 period and was Minister of Science and Technology. Listen to this professor from the Aju Institute of Technology explain how far North Korea has advanced in its nuclear development.

[Kang Sin-ku] According to some U.S. nuclear experts, North Korea is expected to reach a point of producing its own nuclear weapons by roughly 1995. Do you think North Korea is capable of producing its own nuclear weapons?

[Chong Kun-mo] North Korea imported from the Soviet Union in 1965 a nuclear reactor in the two-four megawatt range, and then expanded its capacity to the range of eight megawatts using its own technology. In the meantime, North Korea independently built another nuclear reactor in the 30 megawatt range in Yongbyon in February 1987 and has been operating it ever since.

What attracts our attention more than anything else is a large nuclear reactor in the 50-200 megawatt range that North Korea started building in 1984 and which is still under construction.

Recently, it has been confirmed that North Korea has built a nuclear detonation device testing site and a nuclear fuel reprocessing plant, proving that North Korea is in the process of developing its own nuclear weapons.

[Kang] Although some seem to doubt North Korea's ability in nuclear development, North Korea's nuclear capability seems to have reached a relatively high level given the fact that it has expanded its independent nuclear reactor's heat output and has built a gas-cooled reactor in the 30 megawatt range.

### Yearly Production of 10 Kg of Plutonium

[Chong] Given the fact that during the sixties and seventies North Korea had a total of 250 researchers trained in the (Duvna) Institute, which played the leading role in the USSR's nuclear development, and that it now keeps a total of 2,400 specialists permanently stationed in Yongbyon, North Korea's nuclear development capabilities can be said to have reached a relatively high level.

In particular, the graphite-moderated gas-cooled reactor in the 30 megawatt range is identical in size and type to the (?Brookhaven) reactor used for the U.S. Manhattan Project. This type of nuclear reactor is capable of producing about 10 kg of plutonium a year, the base material for manufacturing atomic bombs.

Since the atomic bomb dropped on Nagasaki, which was in the range of 20 megatons, was made of about 6.2 kg of plutonium, North Korea can be said to have a nuclear reactor that is capable of producing enough plutonium for at least two Nagasaki-size atomic bombs a year. When the third reactor now under construction is completed and put into operation, North Korea will be able to produce 18 to 50 kg of plutonium a year.

[Kang] Gas-cooled nuclear reactors need graphite concentrate. Some wonder whether or not North Korea is capable of producing graphite concentrate.

[Chong] Gas-cooled reactors, unlike the light-water or heavy-water reactors operating in our country, need air instead of water to cool themselves. Graphite is used as a moderator to control the neutron in this type of reactor. It can be easily obtained as it is traded as industrial material in the international market.

[Kang] Given its use of gas-cooled nuclear reactors, North Korea seems to be developing atomic bombs with plutonium as their base.

Why do nuclear powers use gas-cooled reactors for the production of plutonium?

[Chong] Uranium-238 produces two kinds of plutonium: plutonium-239 and plutonium-240. Plutonium-240 creates a headache when manufacturing atomic bombs. Since plutonium-240 tends to react earlier, the less plutonium-240 contained in a nuclear bomb the better.

Gas-cooled reactors are used for the production of materials necessary for atomic bombs since they produce less plutonium-240 when they burn uranium-248. The heavy-water reactor at Wolsong in our country produces too much plutonium-240 when burning nuclear fuel, and it is difficult to use the reactor for the production of materials necessary for nuclear weapons.

[Kang] According to reports, the Soviet Union announced that it would stop supplying nuclear materials to North Korea. Do you believe that North Korea is capable of obtaining the necessary nuclear materials on its own?

[Chong] Since the gas-cooled reactor uses natural uranium, North Korea will not have much difficulty in obtaining nuclear fuel if it has deposits of natural uranium. According to the IAEA, North Korea is believed to be using uranium metal and uranium oxide as nuclear fuel.

In addition, North Korea has no problem at all in getting supplies of nuclear fuel on its own because it has a large-scale uranium mine in Pyongsan with a deposit of 4 million tons.

[Kang] If North Korea is equipped with such basic conditions for the manufacturing of nuclear weapons, then whether or not North Korea has nuclear reprocessing technology that is absolutely necessary for developing nuclear weapons will be a key question.

### Nuclear Fuel Reprocessing Technology Easy To Acquire

[Chong] The nuclear reprocessing technology of extracting plutonium from the spent nuclear fuels is not hard to develop. Those who were involved in a study conducted in the United States in the seventies to find out whether or not developing countries are able to acquire the nuclear fuel reprocessing technology concluded that any country equipped with wine brewing technology can acquire the nuclear fuel reprocessing technology. The question is whether governments in these countries can provide enough assistance for the production of nuclear weapons.

Just as India developed its nuclear weapon and tested its explosion in 1974, North Korea can do it easily if it is so determined.

[Kang] Even designing nuclear weapons requires relatively high technology. Do you think North Korea has acquired such technology?

[Chong] In principle, there are about 120 ways to develop nuclear weapons, and anyone at the level of a student majoring in science and engineering can do it. However, it requires relatively high technology to do so with high precision, including accuracy and reliability.

Nuclear bombs can be classified largely into two categories: one is a gun type, and the other is an implosion type. The gun type places the projectile, a subcritical piece of uranium, in a gun barrel and fires it into its target, another subcritical piece of uranium, so as to make the subcritical masses clash simultaneously. The implosion type raises the density of the nuclear material inside a ball by detonating 64 charges placed on the surface of the ball-shaped nuclear bomb simultaneously, thereby causing the nuclear material inside the ball to start a chain reaction. The gun method was adopted into the atomic bomb dropped on Hiroshima, Japan, which was nicknamed "Little Boy." As this method proved difficult to control the explosion, the implosion method is more widely used nowadays.



[Kang] Is the testing site of high explosives shown in recent satellite photographs related to a nuclear detonating device?

[Chong] It is. As the implosion type needs simultaneous detonation of all charges, it requires a high level of detonating technology. This means that the crater-like testing site in recent satellite photographs seem to be the results of a detonation test.

From the early seventies, North Korea is reported to have drawn criticism for having contacted scientists who were involved in the Manhattan Project, including Dr (Higgins Bodem) who designed the detonation of the Manhattan Project. Judging from the sign of North Korea's hasty attitude, North Korea seems to have mastered the detonation technology by this time.

[Kang] Then, North Korea appears to have mastered technology for manufacturing nuclear bombs. Some experts worry that North Korea may acquire a nuclear bomb by 1993, earlier than the U.S. Government predicted, that is, by 1995.

[Chong] It is true that the theory that North Korea may acquire nuclear bombs earlier than expected is well founded.

There are people who believe that over the past four years, from its 40-kw-class nuclear reactor, North Korea has acquired a total of 30 kg of material for nuclear weapons (plutonium) sufficient enough to manufacture five to six Nagasaki-class bombs and that it has already completed facilities to reprocess this material. Therefore, there is a possibility that it may be able to manufacture nuclear bombs before 1993. I do not think that the fact that the United States is urgently calling for an inspection of North Korea's nuclear facilities has anything to do with this possibility.

In view of North Korea's capabilities, I think, North Korea can manufacture primitive nuclear bombs.

[Kang] North Korea signed the Non-Proliferation Treaty in October 1985, but has refused to subscribe to the Full-Scope Nuclear Safeguards Agreement, to which it should subscribe within 18 months after the signature of the treaty. North Korea has passed the deadline by four years as of now. Then, what do you think of North Korea's nuclear strategy?

[Chong] As a precondition for subscribing to the agreement, North Korea has demanded that a reference to a need to "turn the Korean peninsula into a nuclear-free zone" be included in the preamble of the agreement and that the reference "the agreement can be abrogated depending on the change of the circumstances of nuclear nations" be included in Clause 26. However, I think that North Korea has refused to subscribe to the agreement to buy time for developing nuclear weapons.

I think that North Korea will ultimately subscribe to the safeguards agreement. Still, it appears that North Korea will do so after manufacturing two or three nuclear bombs.

[Kang] Nuclear bombs can be efficiently used in modern warfare only when there are delivery means. Do you think that North Korea's Scud missiles can be loaded with nuclear warheads?

[Chong] A chain reaction was caused to a mere 1.2 percent of the fuel of the bomb dropped on Hiroshima. Still, this bomb caused many casualties. If a Scud missile loaded with a nuclear warhead is dropped on a population center, it will cause massive casualties, even though its precision is relatively low.

[Kang] How do you think we should respond to North Korea's moves?

[Chong] We must make diplomatic efforts to prevent North Korea from developing nuclear bombs. I also think that we, freeing ourselves from our reliance on foreign technology, must master nuclear technology by ourselves.

#### **U.S. 'Flexible Attitudes' on Nuclear Weapons Noted**

*SK0605104591 Seoul YONHAP in English 1023 GMT 6 May 91*

[Text] Seoul, May 6 (YONHAP)—The United States is considering taking flexible attitudes towards North Korea's demand for removal of tactical nuclear weapons from the Korean peninsula in a bid to encourage it to open its nuclear facilities to international inspections, according to a local report here Monday.

"It is under a discreet consideration to relocate the U.S. tactical nuclear weapons held by the U.S. forces in Korea with a view to creating an atmosphere suitable for letting North Korea acquiesce in international nuclear inspections," the CHUNGANG ILBO quoted an anonymous source as saying.

Though the United States had so far taken a policy of no-confirmation and no-denial on the existence of nuclear weapons on Korean soil, it is widely believed the U.S. forces deployed in Korea are armed with tactical ones.

"It is the judgement of ranking Korean and American officials that the issue concerning the tactical nuclear weapons known to be held by the U.S. forces in South Korea should be touched upon in any form in order to properly cope with the matter of North Korea's development of atomic weapons," the source was quoted as saying.

North Korea signed the Nuclear Non-Proliferation Treaty (NPT) of the International Atomic Energy Agency (IAEA) in 1985 but has yet to join the nuclear

safeguards accord and there has been rising international concern that Pyongyang may soon have nuclear weapons.

Pyongyang has said it would not sign the safeguards accord as long as Washington deploys nuclear weapons in Korea.

A U.S. plan now under consideration is to replace the existing nuclear arsenal with air-launched ballistic missiles (ALBMs) or the submarine-launched ballistic missiles (SLBMs) of the 7th U.S. Fleet in the Pacific, the paper said.

The plan, which was once considered before the 1980s, sprang into practicality as high-tech weapons proved their accuracy and power in the Gulf war.

Such a position has been repeatedly voiced by the U.S. side and William Taylor, vice president of the Center for Strategic and International Studies, recently told a news conference here that Korea and the United States should consider removal of ground-based weapons, given the alternative of air- and sea-borne launching platforms for nuclear weapons, according to the report.

#### **Official Opposes North-U.S. Nuclear Inspection Linkage**

*SK0705010691 Seoul YONHAP in English 0038 GMT 7 May 91*

[Text] Seoul, May 7 (YONHAP)—South Korean Foreign Minister Yi Sang-ok opposed Monday linkage between international inspection of North Korea's nuclear facilities and the atomic weapons of American troops based in South Korea.

"North Korea should fulfill the obligation of nuclear inspection under Article 4 of the Nuclear Non-Proliferation Treaty [NPT]. Inspection of North Korea's nuclear facilities should not be linked with other matters," Yi said in commenting on reports that U.S. nuclear arms could be withdrawn from South Korea to force North Korea to open its facilities for international inspection.

"By linking the inspection with matters involving U.S. forces' nuclear capability, North Korea is trying to avoid fulfillment of the NPT obligation. North Korea should take a more responsible attitude toward the matter," the foreign minister said.

Yi said that allowing international inspection of its nuclear facilities would positively affect North Korea's relations with the United States and Japan.

North Korea joined the NPT in 1985 but has not yet signed the safeguards accord of the International Atomic Energy Agency [IAEA], under which it has to open up its nuclear facilities and production to international inspection.

North Korea has argued that inspections should be conducted on both halves of the Korean peninsula, particularly the American troops stationed in the South.

Recent reports said the United States was pondering pulling its nuclear arms out of South Korea to encourage North Korea to open its facilities to inspection. The United States has denied them.

North Korea is said to be only a few years away from making an atomic bomb.

## **TAIWAN**

#### **Poll Reveals Growing Support for Nuclear Power Plant**

*OW1105201991 Taipei CNA in English 1449 GMT 11 May 91*

[Text] Taipei, May 11 (CNA)—More and more Taiwan residents favor the building of a fourth nuclear power plant on the island, according to a poll conducted by the mass-circulation UNITED DAILY NEWS.

Conducted between May 6 and 8 but released Saturday, the survey showed that 60.6 percent of Taiwan residents favor the building of the nuclear plant, up from the 40.1 percent recorded in March of 1988; 10.4 percent oppose it, down from 20.4 percent.

Worries about power shortages are the main reason people support the plant, the poll found.

According to the survey, 40.9 percent of those polled believe nuclear power is safe, up from the 20.4 percent recorded in 1988; 40.1 percent believe what the state-run Taiwan Power Company says about the safety of the plant, up from 10.4 percent in 1988.

People living near existing nuclear power plants and the site of proposed plant who approve the construction of the plant increased to 30.5 percent from 20.8 percent; opposition declined from 40.4 percent to 30.8 percent.

Most people surveyed say it is essential for Taipower to solicit the support of people who reside near the site of the proposed plant before beginning construction.

The poll sampled 1,296 Taiwan residents randomly chosen from the telephone directory. A total of 832 valid replies were collected.

#### **Taipower May Not Build 5th Nuclear Power Plant**

*OW1505092691 Taipei CNA in English 0822 GMT 15 May 91*

[Text] Taipei, May 15 (CNA)—Taiwan Power Company (Taipower) said that it would not consider building a fifth nuclear power plant if construction of the 4th nuclear plant proceed smoothly.

Taipower will increase its power generation capacities by adding more power generators at its three existing nuclear power plants and at the proposed 4th plant.

Some 14 generators can be added at the four nuclear plants, thus increasing installed nuclear capacity by 20 million kilowatts, Taipower said.

Geological limitations do not permit additional sites appropriate for nuclear power plants, Taipower engineer Tsai Mao-tsun said. Adding more generators at existing power plants is the best way to increase nuclear power capabilities, he added.

It usually takes about 107 months to add generators, one year longer than the 96 months required to build the proposed 4th nuclear plant because additional environmental impact evaluations will be needed, according to Yu Shen-hsiung, director of Taipower's department of power resources development.

Electricity consumption reached a 1991 peak of 12.9 million kilowatts in the Taiwan area Tuesday. Taipower called on the public to conserve electricity in order to avoid power shortages.

## BULGARIA

### Post-Chernobyl Radiation Control Plan Described

*AU0105191391 Sofia DUMA in Bulgarian  
26 Apr 91 p 2*

[Meglena Ilieva report]

[Text] A system of constant radiation and chemical and biological control was established in Bulgaria after the Chernobyl accident, Lieutenant General Mikhail Yovchev, head of Civil Defense of the Republic of Bulgaria and deputy minister of defense, said. Laboratories for gamma-spectrometric analysis have been established in the major cities, and they conduct permanent control. At present, every radiation emission is immediately noted by those systems, the General added.

He said that a plan has been prepared on action in case of an accident at the Kozloduy Nuclear Power Plant. Much has been done to inform the population within a zone of 30 km. around the nuclear plant. The population in the region has fully been provided with antiradiation cites and masks. More than 104,000 gasmasks have been distributed. Unfortunately, the situation in other parts of the country is different, Gen. Yovchev said. Some 1.5 million gasmasks are needed. For the time being respirators are used instead of gasmasks.

This does not mean that no protection means exist, Yovchev said. The Army has its own antiradiation means, which will be used if necessary.

The General said that during the Gulf crisis, the Civil Defense did not sell even one gasmask to foreign armies, except the quantity transferred to the Bulgarian diplomats in the Gulf region.

Gen. Yovchev expressed concern with the antiradiation shelters situation. Some 30 percent of the 68,000 such shelters in the country are not ready for use.

It was announced that currently one third of the population is provided with calcium iodine for cases of radiation. Minimum funds are necessary for purchasing the necessary two-three tonnes of this substance, which will guarantee the population's total iodine protection.

### Zhivkov Bodyguard Testifies at Chernobyl Trial

*AU0405154691 Sofia BTA in English 2213 GMT  
3 May 91*

[Text] Sofia, May 3 (BTA)—After the Chernobyl accident, in Bulgaria "there were issued instructions to keep complete silence over it," Todor Zhivkov's personal bodyguard Rumel Ralchev said today at the Sofia trial on the consequences of the 1986 Chernobyl accident. The defendants are a former deputy prime minister and a former deputy minister of health.

Todor Zhivkov himself was informed of the accident in the middle of the night of April 30 to May 1 by the then

Soviet ambassador to Sofia Mr. Leonid Grekov. On the following day there was held a meeting of "high ranking officials." After this meeting the meals of the former No. 1 began to undergo radioactive control as well.

Employees of the former Security and Protection Department which provided bodyguard services and catered the party and state leaders, testified today that as early as May 2 a special radioactivity control commission was set up with their department. The maximum permissible levels set by the standing governmental commission headed by the then deputy prime minister and now defendant at the trial, Grigor Stoichkov had seemed too high to the Security and Protection Department commission.

At today's hearing two witnesses gave contradictory evidence to the question whether the Bulgarians were exposed to an admissible level of radiation. It is difficult to say how the court will view this contradiction. One of the witnesses said that regardless of the standards the Bulgarians could have received a lower level of radiation exposure if there had been sufficient information and stricter control. But I do not know just how far our proposals reached and where they were stopped, the witness, who works at the Nuclear Medicine Institute, said.

Our meetings never mentioned a radioactive threat another witness said in connection with the sessions of a medical commission on the mass marathon held in Sofia on May 18.

### Witness Questions IAEA's Chernobyl Assessment

*AU0705213491 Sofia BTA in English 2030 GMT  
7 May 91*

[Text] Sofia, May 7 (BTA)—"Hans Blix, director general of the International Atomic Energy Agency, made a gross mistake with his infinitely smiling and rosy prediction of the effects of the Chernobyl accident in Belorussia," said Mr. Bosevski, a medical corps officer, head of the Radiation Hygiene Laboratory at the Academy of Military Medicine, bearing witness at the Chernobyl trial today. He told the court that Mr. Blix, otherwise an authoritative official, was guided by some specific considerations on the development of nuclear power. Mr. Bosevski also called into question Mr. Blix's conclusions minimizing the effects for Bulgaria.

The witnesses called today blamed the defendants Grigor Stoichkov, former chairman of the Standing Governmental Commission for Management of Natural Disasters and Major Industrial Accidents, and Professor Lyubomir Shindarov, former sanitary inspector general, of acting inadequately to provide protection of the public against the effects of the accident.

Prof. Iliya Belokonski, former deputy chief of the Academy of Military Medicine, said that one Kiro

Kirov, then secretary of the standing government commission, had forbidden him to deal with Chernobyl problems. Prof. Belokonski was told that their truth was not needed.

The evidence given by Prof. Tsvetan Vasilev, head of the Nuclear Physics Department at Sofia University, made it clear that the witness supplied Bulgaria's former Number One Todor Zhivkov with information on radiation levels and specifically on the hot particle fallout. The same professor travelled to Moscow on a confidential trip to see Academician Velikhov and hand him the hot particles information gathered in Bulgaria. The witness contended that the Soviet Union then ignored that factor, which a number of Bulgarian scientists believed could be a public health hazard.

One year after the ban on nuclear tests in the atmosphere, the average European was exposed to 15-20 becquerels per kilogramme of bodyweight; one year after the accident, the population of southern Bulgaria had 300 becquerels per kilogramme, the witness Bosevski said. He explained that the readings taken in the southern part of the country at that time were equal to the exposure figures of the people of Bryansk in the restricted zone in February-April 1987.

"Insignificant as it may seem, the average European exposure forced the superpowers to discontinue nuclear testing; since 1986, however, there are people who have been bargaining like shopkeepers about permissible doses and the likely fatality rate," Mr. Bosevski pointed out.

As time ran out, the parties to the case today did not take a stand on the witnesses who had defaulted their summons, including former supremo Todor Zhivkov.

The trial will resume tomorrow.

## CZECHOSLOVAKIA

### Inspectors List 104 Defects in Nuclear Plants

LD0705184191 Prague CTK in English 1345 GMT  
7 May 91

[Text] Prague May 7 (CTK)—A total of 104 defects were registered at Czechoslovakia's nuclear power plants last

year one of which was of the 2nd degree on the seven-degree international nuclear events scale (INES), three of the 1st degree and 100 of the zero degree.

Up to degree 3 of the INES no radioactivity leak is involved.

Meeting with journalists here today, Zdenek Kriz, chief inspector of the Czechoslovak Commission for Atomic Energy (CSKAE), also spoke about inspections carried out by the commission in the plants at Jaslovske Bohnice, West Slovakia, and Dukovany, South Moravia, last year.

The commission paid special attention to the V1 unit at Jaslovske Bohunice which has been strongly criticised by Austria. A set of 81 measures to raise the unit's safety has been worked out. The measures are to be carried out in 1991-92 at a cost of 1,500 million crowns (1 USD = 30 crowns).

The Jaslovske Bohunice plant was inspected last April by a mission of 16 experts from nine countries, Kriz said. Their conclusions supported practically all the measures recommended by the CSKAE.

But the mission was strongly critical of the management, organization of work and possibilities of independent inspection in the plant, Kriz said. He added that though the qualification of the staff is at a very high level, the regulations for operation are not often observed.

Discussion at the press conference concentrated on the safety of the A1 unit at Jaslovske Bohunice after the 1977 break-down. Kriz said the danger to the environment still persists. It would be fully liquidated only if the burnt-out fuel were taken to the Soviet Union which is now being discussed. But talks are being conducted also with Britain, France and Germany.

Petr Horacek from the federal committee for the environment added that this situation is a big "sin" committed by the former communist regime whose rectification will cost hundreds of millions of crowns.

Two more nuclear plants are being built in Czechoslovakia, one at Mochovce, West Slovakia, and the other one at Temelin, South Bohemia.

At present, nuclear plants account for about 27 per cent of electric energy generation in Czechoslovakia.

## ARGENTINA

### Ministers Decide To Deactivate Missile Program

#### Defense Minister Holds Out

PY0505232091 Buenos Aires BUENOS AIRES  
HERALD in English 5 May 91 p 1

[Text] (NA)—The Argentine defence, foreign and economy ministers met yesterday to agree on a "concrete plan" to deactivate the Condor II missile programme and remove the Space Investigations Commission from under military control, placing it under direct control of the presidency.

The three ministers agreed to cancel the nuclear-capable missile programme in time for Defence Minister Erman Gonzalez' upcoming visit to the US, where he will meet with Defence Secretary Dick Cheney.

The transfer of the Space Investigations Commission to civilians hands would also mark a significant change in Argentine policy, which has traditionally seen such projects run by the military.

Defence Minister Antonio Erman Gonzalez, however, yesterday said that the Condor II programme could continue if Argentina signed a multi-national pact to develop the missile for peaceful goals. "It is one of the alternatives," Erman Gonzalez said, "for mutual control of the project."

#### President Menem Assures

PY0705003891 Buenos Aires TELAM in Spanish  
1537 GMT 6 May 91

[Text] Buenos Aires, 6 May (TELAM)—President Carlos Menem has assured that the project to build the Condor-2 missile has been totally deactivated. He denied the existence of any pressure by the United States and Europe to make such a decision.

The chief executive said the Condor-2 project has been "totally deactivated." He affirmed that the nuclear technology used to build it "can be used for peaceful purposes." Menem denied foreign pressure to make this decision and, although he emphasized that he is "respectful toward international relations," he asserted the concepts of "sovereignty and autonomy."

Menem made these remarks after dedicating a new bottling and distribution plant for Pepsi Company, BAESA (Buenos Aires Bottling Company, Inc.), at the intersection of Cruz Avenue and Pepiri Street, in Pompeya District. Menem rejected reports of tension within the Air Force over suspension of the project because "the Armed Forces commander in chief does not admit any type of tension."

Moving on, Menem flatly ruled out the existence of a government campaign to discredit the Radical Civic Union because "this is not our style." He said: "We have

been the subject of many attacks recently, but we will not pay them back in their own coin."

Menem believes the conflicts between Acindar [Argentine Steel Industry, Inc.] and Cantabrica metalworking companies and their personnel should be "settled this week." He said the situation "is the result of the need for change, for reorganization." Menem said this "is the way these companies operate, produce, and reduce their costs in order to be able to compete." He reiterated that "one cannot make a 180-degree turn without any political cost."

Concerning the closure or privatization of the Argentine Medium Tank Factory, Menem pointed out that "the entire Armed Forces are in the process of reorganization."

After formally dedicating the new bottling plant by cutting ribbons and after it was blessed by Father Juan Carlos Esparza, Menem inspected the facility.

BAESA President Charles Beach said: "This is the first time we are betting on development of our activities in a country that is not related to ours." He added: "We are doing this with absolute certainty that we chose well since the possibilities and potential of Buenos Aires and the Argentine Republic are unlimited."

BAESA Vice President Ricardo Moreno said: "We are responding to the requirement of increasing production activities and improving the standard of living, which are the goals proposed by our national government."

#### Deactivation of Condor-2 Denied

PY0605220691 Buenos Aires BUENOS AIRES  
HERALD in English 6 May 91 p 7

[From the "Argentina in Brief" column]

[Text] (DYN)—The Defence Ministry said in an official statement released last night that the Argentine Government had made no definitive plans to deactivate the Condor II missile programme, as was solicited by the United States government. "Contrary to versions published today regarding the present status of the Condor II project, the Ministry of Defence has yet to decide whether or not the project will be deactivated," informed the press spokesman for that ministry which is headed by Antonio Erman Gonzalez. In a statement read over the phone to reporters, the spokesman asserted that during the meeting, which took place on Saturday [4 May] between the Argentine defence, foreign and economy ministers at the Foreign Ministry, "only hypothetical plans were discussed; no definite decisions were made."

#### Signing of Missile Control Agreement Considered

PY0605162691 Buenos Aires LA PRENSA in Spanish  
5 May 91 pp 1, 4

[Excerpt] Defense Minister Antonio Erman Gonzalez has reported that "the government is studying the possibility of joining an international agreement for the

mutual control of missile technology development," known as the MTPR [Missile Technology Proliferation Regime].

Gonzalez explained that the MTPR imposes some "restrictions and safeguards on its members," so that "certain types of research, which could lead to the production of highly dangerous missiles that can pose risks for nations or for world peace, will not take place."

"This is the healthiest attitude that Argentina can adopt in order to show that we are not engaged in an arms race, especially as it refers to nonconventional arms like chemical, biological, and nuclear weapons," the minister said.

Gonzalez's statement is linked to the discrepancies that arose some two weeks ago, when the U.S. Government—through Ambassador Terence Todman—expressed concern over our missile project.

While one sector wanted to dismantle the project and receive compensation from the United States—considering the investment made in the project—another sector proposed keeping the elements that could be used to produce a rocket for strictly peaceful purposes.

The Condor program began in 1984 using Egyptian and Iraqi capital and German technology. It was developed during the government of Raul Alfonsin. [passage omitted]

### Peaceful Uses of Condor-2 To Continue

PY1305154291 Buenos Aires NOTICIAS  
ARGENTINAS in Spanish 1334 GMT 13 May 91

[Text] Buenos Aires, 13 May (NA) — Defense Minister Erman Gonzalez has announced that "all the installations and equipment" used for the development of the controversial Condor-2 missile will be placed under the National Commission for Space Research (CNIE) and will be used to produce a rocket capable of placing satellites in orbit.

Gonzalez defended the importance of continuing the project for peaceful purposes at a time when "a nonconventional arms project which could have provoked a regional imbalance" has been abandoned.

In remarks to AMBITO FINANCIERO while he was in London, the minister stated that now that we have deactivated the military aspect of the Condor-2 project we have the right to demand that neighboring countries follow our example. He stressed that Argentina "continues to try to develop satellite technology" and that to achieve this "we will make available all the Condor-2 installations and equipment to the CNIE," which is an Air Force organization that will now be directly subordinated to the presidency.

"It is important to retain the useful components, especially the trained personnel," Gonzalez stressed when he

implicitly refuted reports of the total destruction of the plans and the equipment used to build the missile.

Gonzalez stated that in order to develop this project "we must sign agreements with other countries, but not necessarily with the United States," adding that "the schedule for dismantling Condor-2 began in May or June 1990 and that everything that was assembled or in the process of being assembled has been deactivated and the schedule will conclude when the CNIE is subordinated to the presidency."

## BRAZIL

### Satellite Launch Vehicle Bidding Heats Up

#### U.S. Pressure Alleged

91SM0299A Sao Paulo O ESTADO DE SAO PAULO  
in Portuguese 1 May 91 Economic Section p 1

[Article by Jorge Zappia: "Growing Competition to Launch Rocket"]

[Text] The competition to launch the first Brazilian artificial satellite has led Frenchmen and Americans to band together to put on pressure to prevent the awarding of the contract to a consortium in which the Soviet Union would be supplying the technology. In this conflict of interests, ironically, a U.S. company—Space Commerce Corporation—is working in favor of the Soviets and thus against another U.S. firm—Orbital Science Corporation—which is an ally of the French.

Sergio Roberto Pinto Teixeira and Omar Gattas are superintending director and commercial director, respectively, of Elebra Defense Systems, Ltd., which has formed the consortium with the Soviet firm Glavkosmos and the North American Space Commerce Corporation (SCC); the two directors have written to ESTADO DE SAO PAULO complaining that U.S. Government officials have "warned" Brazilian technicians and military officers about the "problems" which the country would face if it awarded the contract to the Soviets. The "problems" would include difficulties in transferring sensitive technologies and a harder line in the negotiations regarding Brazil's foreign debt.

According to the Elebra directors, as a part of this pressure game, Gen. Agenor Homem de Carvalho, chief of the Military Household of the Presidency, received a memorandum from the European space consortium Arianespace advising that the Western countries would view the possible choice of the partnership with the Soviets as an indication that Brazil is seeking to acquire strategic technological capability for military purposes. Approached by ESTADO DE SAO PAULO, Jacques Mercier, Arianespace representative in Brazil, refused to say anything on the subject.

Military sources in Brasilia said they were unaware of the existence of the Arianespace memorandum, a portion of which was published in FOLHA DE SAO PAULO, and denied that there was any pressure. A day after ESTADO sought out technicians and military officers, the Government classified the project as "top secret" and sent down an implicit order calling for silence on the matter—this according to an official of one of the firms that is bidding on the contract. A military officer sounded out by ESTADO said the awarding of the contract is now a political decision.

### Options

President Fernando Collor is already in possession of all the technical information needed to decide on one of three options.

The international consortium which Elebra formed in 1989 with the SCC and Glavkosmos, named Alport (Alcantara Spaceport), offers two alternatives for launching the 117-kg satellite built by the National Institute of Space Research (INPE). The first alternative provides for a test launching and then the definitive launching of the satellite in space; the rockets would be launched from a Soviet submarine stationed off the coast of Maranhao. The cost would be \$10 million.

The other alternative of the Alport consortium also provides for the launching of two satellites, except that they would be carried in the nose of the Kosmos rocket, which would be launched from the Alcantara space base. The Soviets would install a launch pad and the telemetry equipment to follow the flight; 24 months later, when the initial investment of \$30 million by the Brazilian Government is completed, the Soviets would come to compete, through their consortium with Elebras and the SCC, in the satellite launching market, worth an estimated \$6 billion a year.

The second option available to President Fernando Collor is that of the Orbital Science Corporation and consists in launching the INPE satellite by means of a Pegasus-type rocket. Tested for the first time last year, the rocket is fired from the roof of a B-52 bomber at an altitude of 15,000 meters. It costs \$10 million. The third option, according to the military officer who spoke with ESTADO, would be to launch the satellite with a rocket of the Scout type, manufactured by the LTV Missile and Electronic Group. In this case, the cost would be \$14 million.

These three options were selected from among the 11 analyzed by the Brazilian Commission for Space Activities (Cobae). The two alternatives presented by the consortium led by Elebra came out first from the standpoint of the transfer of technology.

According to Sergio Roberto Pinto Teixeira, the decision in favor of Alport was made on 27 February in a meeting of the Cobae, formed by 12 Government ministries and secretariats. Only the Ministry of Foreign Affairs opposed the decision, arguing that the proposal needed

further analysis because the Soviet rocket would be one that is known to be a military launcher. At that time, with the war in the Gulf, the choice of the Kosmos could be seen as politically provocative.

The Gulf War was also mentioned in the memorandum which Arianespace sent to Gen. Agenor Homem de Carvalho. One passage referred to the "illusion" of the transfer of Soviet technology, citing the example of the Scud missiles, which were only developed on acquisition of Western technologies. Gen. Jonas de Moraes Correia Netto, then minister-chief of staff of the Armed Forces (EMFA) and of the Cobae, sent the president an explanation of the reasons for the decision and a request for its approval. However, Collor asked for another assessment by six ministries and secretariats and, once again, according to Elebras superintending director Sergio Pinto Teixeira, the Foreign Affairs Ministry opposed awarding the contract to the Alport consortium.

Teixeira and Gattas have no doubt that "there is enormous pressure on President Collor by the Americans and the Frenchmen." The Americans have 40 percent and the French have 60 percent of the world market for satellite launching. "They do not want Brazil to have the ability to compete in the market which they control," claim the Elebras directors, for whom a decision against Alport would mean the loss of \$600 million in business which they would obtain if the consortium won the launch contract. The military issue, they maintain, is simply a smoke screen to cover up the Orbital Science Corporation's attempt to win the contract.

### Soviet Interest in Alcantara

*91SM0299B Sao Paulo O ESTADO DE SAO PAULO in Portuguese 1 May 91 Economic Section p 9*

[Text] The Soviets are interested in an association with Brazil for the use of the Alcantara base in Maranhao, for purely commercial purposes, said Sergio Roberto Pinto Teixeira, superintending director of Elebra Defense Systems, Ltd. Although the Soviets have a whole family of rockets of proven effectiveness, their launch base—Baikonur, in the south of the Soviet Union—is still closely linked with the nuclear defense system, under military control, and their marketing is not as good as it could be.

These factors are inhibiting potential buyers for their rockets and led the Soviets to seek an association with the North American Space Commerce Corporation (SCC). With the Soviets manufacturing the rockets and the North Americans marketing them, everything would already be working out if it were not for the need to find an alternative to Baikonur. This is where Brazil came in.

The country joined with the two companies under technical cooperation agreements signed with the Soviet Union in 1988. Sergio Roberto Pinto Teixeira sought out the Soviets and presented the proposal for the consortium. His trump cards in this negotiation were the fact that Alcantara already had the infrastructure (at a cost of



\$400 million), Brazil's influence with the Third World countries, and Alcantara's proximity to the equator. "A Kosmos rocket needs less fuel to reach the stratosphere because it has the advantage of the thrust provided by the movement of the earth itself, so it can easily carry two satellites instead of just one," Teixeira explained.

"It is not by accident that the North Americans built Cape Kennedy at the extreme southern tip of Florida and the French located their Kourou base in French Guiana," said Omar Gattas, commercial director of Elebras. According to Teixeira, if the consortium does not win the contract or if it is delayed for too long, the Soviets could opt to enter into a similar agreement with Australia, establishing a base in the region known as Cape Cord.

### Political Decision

*91SM0299C Sao Paulo O ESTADO DE SAO PAULO  
in Portuguese 2 May 91 Economic Section p 7*

[Text] A high-ranking military officer directly involved in the Brazilian satellite launching program described as "healthy" the competition among the Alport (Alcantara Space Port) consortium, the LTV, and Orbital Space Corporation for the contract to supply the rockets. "There is no pressure; it is pure and simple business competition," he said. The military is gathering more information to "prepare the architecture of the contracts" when the president of the republic makes his

choice. According to the officer, the decision will be essentially political, because the best three proposals have already been chosen by the commission charged with the selection.

Technically, on the scale of priorities, which take the transfer of technology into consideration, the Elebra consortium with the Soviets is preferred by the military and by a majority of the civilians on the Brazilian Commission for Space Activities (Cobae). However, there is no elation about the transfer of strategic technologies, or with regard to the rocket navigation systems. "We do not believe there will be a transfer of technologies in any of the cases," said the military officer. Regarding the idea that Brazil could enter the competition for the rocket launching market if it associates with the Soviets, the officer said it was a "very pretentious" notion.

The best thing to do, he said, is to derive the greatest possible advantage from the competitive bidding and thus achieve the primary objective, which is to put the Brazilian satellite in orbit by the first quarter of 1992, when Brazil will host the world conference on the environment. Politically, the officer argued, it will be to Brazil's interest to demonstrate that it has the satellite technology and can use it effectively in the control and collection of data regarding the national territory, particularly the Amazon region.

## ALGERIA

### Sources Say Reactor Data To Be Released

91AA0361A London AL-SHARQ AL-AWSAT in Arabic  
1 May 91 pp 1, 4

[Article by Qusay Salih Darwish: "Algeria Acknowledges Presence of Nuclear Reactor to Contain Campaign"]

[Text] Nouachkott—By acknowledging the presence of a nuclear reactor under construction, Algeria is putting an end to speculation on an issue that has recently aroused extensive controversy. Algeria is also trying to absorb the Western media pressure to which it is being subjected on this issue.

Informed sources in the Algerian capital expect the acknowledgment to be followed by the presentation of full information and detailed figures on the Algerian nuclear reactor in preparation for placing it under the supervision of the International Energy Agency.

The agreement between Algeria and the PRC to build this reactor dates back to 1983. Construction work started at the end of 1986 in the town of Ain Wizar, located 250 km south of the capital. The reactor is relatively small, having a capacity of 15 megawatts. But the presence of one reactor opens the door for building other reactors.

The idea of acquiring nuclear energy dates back to the days of the late President Houari Boumediene, and it constituted a part of his ambitious plan to transform Algeria into a "super" regional power.

This project is founded on a broad base of heavy industries, on developing educational structures and programs and spreading education, and on an important Algerian political presence which permits Algeria to play a first-class role at the African and Arab levels.

Some gigantic projects have surfaced within this context, such as the African Unity Highway which links Algeria with black Africa. It is also within this context that Algerian officials began to feel the need for a land outlet to the Atlantic Ocean via the Western Sahara.

In 1983, the comprehensive process launched by President Bendjedid to review the late president's policy—a review which led to a gradual abandonment of President Boumediene's ambitious political plan—had not started. This review did not occur until the end of 1985 and the start of 1986.

The idea of building a nuclear reactor had made great progress, and it seems that President Bendjedid was convinced of the strategic importance of a nuclear reactor from the perspective of its connection with the limited Algerian oil reserves, considering that Algeria will experience an acute energy crisis in two decades.

But the official acknowledgment of the presence of a nuclear reactor in Algeria will create numerous internal

and external ramifications for the Algerian regime and for Algeria's foreign relations. Internally, the leaders of the fundamentalist Islamic Salvation Front [FIS] have exploited the issue to launch a concerted propaganda campaign in order to rehabilitate the FIS's political message, which has been shaken since the Gulf war, and to regain its status in the political arena, considering that this status has declined because of the front's failure to manage the majority of the municipalities which it has controlled since last year's municipal elections and its failure to establish an election alliance with the other fundamentalist forces that are represented by the Association for Guidance and Reformation (Mahfoud Nahnah) and Ennahda Movement (Shaykh Djaballah).

In their election-oriented propaganda campaign, Islamic Salvation Front leaders say that as of the 12th of last June they expected the United States to strike Algeria after finishing with Iraq, and in a similar scenario. In this regard, they base their expectations on the fact that the initial information about the transformation of Algeria into a nuclear power came from the CIA. From this angle, they are trying to embarrass the regime and mobilize the man on the street behind national issues that are connected with the outside world and that permit the delivery of a resonant address unrelated to the local problems on whose basis Algerian voters might cast their vote. To this moment, the regime has chosen to remain reserved so as to block the path of any endeavor to turn this sensitive issue into an issue of oneupmanship in political elections.

Regionally, announcement of the presence of a nuclear reactor and of Algeria's transformation into a nuclear power will relatively speaking change the prevalent power equation in the region even if the current Algerian leadership does not seek such a change. With this reactor, Algeria will be the first Arab and African country to acquire nuclear energy.

It is evident that inasmuch as it is aware of the importance of this fact, the Algerian leadership is also aware of the dimensions and weight of the responsibility of this development to Algeria itself and to Algeria's relations with the countries of the region, especially with its partners in the Arab Maghreb Union.

Internationally, announcement of the nuclear reactor comes at a time when Algeria's relations with the Western countries, whether with the United States or Europe, and especially with France, are noticeably lukewarm. This tepidity is due in part to the Gulf war. What has been strikingly interesting is that the French foreign minister who visited Morocco, Mauritania, and Libya has not yet visited Algeria even though such a visit was included as part of his Maghreb tour and even though it had been announced officially in Paris.

If President Bendjedid is trying to manage the reactor issue free of clamor and in a manner that permits his country to keep this reactor and to develop nuclear energy, he will try to reassure the Western parties by

familiarizing them with the details of the reactor and with its peaceful purposes, especially since he is aware of the harm and danger of this clamor. President Bendjedid is also aware of the security danger to which Israel could expose Algeria and of the possibility that Israel could stage an attempt to strike this reactor.

EL MOUDJAHID said yesterday that Algeria has offered to open its nuclear program to international inspection.

## INDIA

### Fast Breeder Reactor Begins Operation

91WD0761 Madras *THE HINDU* in English 24 Apr 91 p 10

[Text] Madras, April 23—For the first time since the Fast Breeder Test Reactor (FBTR) at Kalpakkam attained criticality in October, 1985, it has begun operating at one MW thermal power from April 16, providing a shot in the arm to the scientists of the Indira Gandhi Centre for Atomic Research.

"The start-up was smooth. The performance of the various systems is satisfactory," according to Mr. S.B. Bhoje, Station Superintendent, FBTR. The reactor power would be stepped up in stages to 10 MW thermal in about six weeks, he said.

The FBTR, which has a capacity of 40 MW thermal power/13MW of electricity, uses mixed plutonium uranium carbide fuel and liquid sodium as the coolant. It would provide hands-on experience to the IGCAR scientists in building the 500 MW Prototype Fast Breeder Reactor at Kalpakkam. The breeder reactors are called so because they breed more fuel than they consume.

The FBTR was started up on April 16 after a shutdown and it operated for four hours at one MW thermal power. But it was shut down again because of some discrepancies in neutronic instrumentation. The reactor was, however, started up on April 18 and operated at 800 kW thermal power. At 11 a.m. today, its power was raised to one MW thermal.

Checks: Mr. Bhoje said the reactor would operate at one MW thermal for two weeks. The scientists would use the duration to check the performance of the neutronic instrumentation at a significant power, to measure the power coefficient of reactivity, to carry out thermal balance tests, checking out the effectiveness of the radiation shielding around the reactor and for measuring the core temperature.

The heat that was now generated was let into the atmosphere through the steam generator casing instead of converting it into energy. The steam generator with leak detection system—both crucial systems—were necessary for converting the heat into energy.

### Leading Nuclear Scientist Roy Dies

91WD0759 New Delhi *PATRIOT* in English 23 Apr 91 p 6

[Text] Bombay, April 22 (UNI)—Leading nuclear scientist P.R. Roy, father of plutonium metallurgy in India and director of materials group of the Bhabha Atomic Research Centre, died of a massive heart attack here yesterday. He was 54.

He is survived by his wife and a daughter. Mr Roy, a Padma Shri awardee, had played a crucial role in country's underground peaceful nuclear implosion at Pokhran.

He was also known for boosting the country's morale by developing and setting up facilities to fabricate alternative fuel—plutonium enriched mixed oxide fuel—during the late '70s, when there was some uncertainty about the continued availability of enriched uranium to fuel the Tarapur Atomic Power Station.

Mr Roy was the first Indian metallurgist to handle the unique man-made metal plutonium, which had already demonstrated its potential to meet the electricity requirements.

### Offer To Reprocess Spent Nuclear Fuel Reported

BK1605004891 Hong Kong *AFP* in English 1152 GMT 15 May 91

[Text] New Delhi, May 15 (AFP)—India has offered to reprocess spent nuclear fuel from foreign reactors to earn foreign exchange, the PRESS TRUST OF INDIA (PTI) reported Wednesday.

India's Atomic Energy Commission (AEC) has told the Vienna-based International Atomic Energy Agency that it is ready to offer reprocessing services to other countries on a commercial basis, PTI said.

Countries that have been accumulating spent fuel would be able to ship it to India, where plutonium would be sifted from the waste, the report said.

Plutonium is a key ingredient in the fabrication of nuclear warheads, but the AEC stressed that its offer was conditional on prospective clients agreeing to take back the hazardous radioactive waste.

The world has some 125 nuclear reactors whose spent fuel could be available for India to reprocess, PTI quoted AEC Chairman P.K. Iyengar as saying. He did not say how much India hoped to earn from the offer.

## IRAN

### Habibi Opens Nuclear Research Center in Karaj

LD1105123691 Tehran *Voice of the Islamic Republic of Iran First Program Network* in Persian 0930 GMT 11 May 91

[Text] The Karaj nuclear agricultural and medical research center attached to Iran's Atomic Energy Organization was opened by First Vice President Habibi.

According to the Central News Unit, Mr. Habibi viewed various sections of the center accompanied by Mr Amrollahi, the head of the Atomic Energy Organization and vice president; nuclear experts and researchers; and a number of Majles. The officials in charge of each section briefed First Vice President Habibi on the work of each section.

According to the same report, the center is made up of chemistry and ionic radiation laboratories and sections for nuclear, medical, and agricultural research. It will carry out research on the uses of radiation in medicine and agriculture.

## IRAQ

### **Sudan Said Ready To Hold Iraq's Chemical Arms**

*PM0105142191 London SAWT AL-KUWAYT  
AL-DUWALI in Arabic 30 Apr 91 p 1*

[Unattributed report: "After Tariq 'Aziz's Talks in Khartoum, al-Bashir Agrees To Stockpile Iraq's Chemical Weapons"]

[Excerpt] Bonn, SAWT AL-KUWAYT—Reliable sources from the Sudanese People's Liberation Army have revealed that the al-Bashir government has agreed to stockpile Iraqi chemical weapons in Sudan. The sources said that Iraqi Deputy Prime Minister Tariq 'Aziz's visit to Sudan was to that end. 'Aziz conveyed to President 'Umar al-Bashir the wish of the Iraqi regime's leader to move his chemical weapons together with Scud missiles and other advanced weapons to Sudan in order to avoid their destruction in accordance with the international resolution.

Meanwhile, world human rights organizations yesterday revealed that conditions in Sudanese prisons, especially in Shala Prison in Darfur and Kabar Prison in Khartoum, are very bad to the extent that some prisoners are suffering from fatal diseases. [passage omitted]

### **Possession of Biological Weapons Said 'Probable'**

*LD1105123591 Prague CTK in English 1040 GMT  
11 May 91*

[Text] New York May 11 (CTK correspondent)—"It is most probable that Iraq possesses some kind of biological weapons", a Czechoslovak expert on the U.N. ad hoc commission on armistice in the Persian Gulf, has told the CTK correspondent here.

Miroslav Splino, a Czechoslovak expert on biological weapons and member of the 21-member commission, further said that the commission is to submit to the U.N. Security Council its report by May 18. The verification of the deployment of Iraqi weapons of mass destruction and their production equipment as well as their liquidation will, however, be a very complicated task requiring much time. Optimists say it will take six to 12 months while pessimists speak about two or even three years, he

said. Hundreds of highly qualified experts will have to participate in this process, he said.

Asked about the commission's cooperation with the Iraqi side, the Czechoslovak expert said that cooperation is good on the whole but it remains to be verified to what extent the Iraqi information is reliable and complete.

## ISRAEL

### **Ne'eman on Plan for Local Power Plant**

*TA2504164891 Jerusalem Domestic Service in Hebrew  
1600 GMT 25 Apr 91*

[Text] Yuval Ne'eman, the energy and infrastructure, science and technology minister, said that the principles and appropriations for the establishment in Israel of a locally manufactured nuclear power plant, which he believes will be more efficient and safer than similar foreign-made plants, will soon be consolidated.

He also reported that he has decided to increase by 1 million metric tons per annum the quantity of oil Israel will import by contract. A deal on this will soon be signed with Britain. Our correspondent Shmu'el Tal reports that Minister Ne'eman was speaking at the meeting of the Israel Management Center in Tel Aviv.

### **Talks With USSR on Nuclear Desalination**

#### **500-Megawatt Facility**

*TA2604100691 Tel Aviv DAVAR in Hebrew  
26 Apr 91 p 1*

[Report by Pazit Ravina]

[Excerpts] The Israeli Government is currently holding negotiations with the Soviet Union for the purchase of a nuclear reactor. The reactor is a 500-megawatt facility which has integrated desalination installations. The sole existing Soviet model is located on a Caspian Sea peninsula. It provides water for a closed nuclear city called Shevchenko, to uranium mines, and to the nearby nuclear plant. The USSR's declining economic situation in the past few months has made the deal a realistic possibility. The Soviets will probably supply not only the reactor but also the nuclear fuel rods.

An Israeli delegation, one of whose members was Amnon 'Enav, the chief scientist in the Energy and Infrastructure Ministry, visited Moscow about a month ago. The delegation was accompanied by two desalination engineers from Adan Technologies who represented businessman Ya'aqov Nimrodi. Dan Zaslavsky, adviser to Agriculture Minister Refa'el Eytan, was also supposed to have gone with them. During its visit, the delegation signed a preliminary agreement with the Soviet Academy of Sciences about the reactor. Vladimir Velikhov, vice president of the Soviet Academy of Sciences, is expected in

Israel next week to pursue high-level contacts. He will be the guest of Energy and Infrastructure Minister Yuval Ne'eman. [passage omitted]

The technology for the purification of water using nuclear energy is a unique Soviet development. The West began similar projects in the 1960's but they were subsequently shelved. The only active plant of this type in the USSR is in Shevchenko, a closed scientific town in the steppes of Kazakhstan near the Caspian coast. The nuclear plant itself is located on a peninsula and up until a year ago was classified secret. All the plant directors are Russian and any visit to Shevchenko requires special permits.

During the Israeli delegation's visit, the Soviets presented three types of desalination plants, including a future model based on the kind of floating reactor that can be found on nuclear ice breakers. The delegation explained, however, that Israel is only interested in the 500-megawatt energy-generating type of plant with integrated desalination installations. The delegation's reports after the visit were by and large positive.

In reaction, Ya'aqov Nimrodi told DAVAR: "It is too early to discuss the matter at this juncture. We will know where we stand after Velikhov's visit next week." [passage omitted]

[Another report by Pazit Ravina on the same page of DAVAR says that Amnon 'Enav, the chief Energy Ministry scientist, "confirmed that a delegation had indeed gone to the Soviet Union 'to examine, among other things, the issue of nuclear desalination. The issue is broad, complex, and very expensive,' he said, 'but we are continuing our contacts. We have not yet finished examining the matter and are reviewing ways to continue our cooperation.' On Shevchenko, the chief scientist said: 'I can only say that such a reactor exists in Kazakhstan.'"]

### Ne'eman Denies Talks

TA2604101391 Jerusalem Domestic Service in Hebrew  
0500 GMT 26 Apr 91

[Text] Energy and Infrastructure Minister Yuval Ne'eman said his ministry is not dealing with the procurement of a nuclear reactor from the USSR. He said the director general of his ministry did not go to Moscow for that purpose. Minister Ne'eman made the remarks to our correspondent Shmu'el Tal who asked for his reaction to a report published this morning in DAVAR that the government is conducting negotiations to purchase from the USSR a reactor for desalination purposes. Minister Ne'eman told our correspondent that he knows the subject has been brought up as part of an attempt by businessman Ya'aqov Nimrodi to purchase such a reactor, but that such a reactor has not yet been developed.

## PAKISTAN

### Editorial Questions U.S. Interests in Nuclear Issue

BK0705051391 Islamabad THE MUSLIM in English  
5 May 91 p 6

[Editorial: "What Is This See-Saw All About?"]

[Text] To be fair to President George Bush it must be admitted that he has left us in no doubt as to what he expects from us. He wants total and abject surrender on some of those issues we happen to hold important. For instance, our sovereign right to decide what is good for us. Mr. Bush has views so strikingly different as to be almost irreconcilable from our position. He seems to believe that our nuclear research programme is a crime against what he considers is the *law* as made for the United States at the Capitol Hill in Washington. That the *law* in question appears to us to favour the Zionist appetite rather than our palate is irrelevant to Mr. Bush. He has no time for our submission in respect of our defence concerns. Now that he has lost all interest in Afghanistan, Pakistan is dispensable. That's the crux of the matter. All that talk of defence of democracy in Afghanistan was poppycock. Those who had eyes and the honesty to see what Pakistan's real interest at heart was, have been saying so from the very beginning. But the dictator in power ordained otherwise. He made horrible errors. We must now bear the consequences. Loss of U.S. charity is one of them, but by no means the most galling.

What is the most galling part of this unedifying part of the see-saw going on between Islamabad and Washington? It is the submissive vacillation in Islamabad and growing arrogance in White House. Every other day the Pakistani citizen is pestered with all manner of speculative stuff purveyed by interested quarters, via their obliging publicists, through the indiscriminating—or unwary—media. An open-eyed observer finds this no more rewarding than a cat-and-mouse diversion. President Bush has said that he had said the last word. Why can't we see the obvious?

We have been led by the development of events to believe that Mr. Bush wants just one thing. Humiliation of this country is his sole objective. This is not to be confused with his concern about proliferation of nuclear weapons. If Israel has the weapons the peace of the world is strengthened. If Pakistan should have even a modicum of theoretical knowledge on this subject, the peace of the planet is thrown into dire jeopardy. When such be the logic, what is there to negotiate? Why do we find stories thrown into our face about possible meetings between Pakistan and the US at unspecified levels, in unspecified places on unspecified dates? If there is nothing we can do about the spreading of these bits of slights, we can at least do ourselves the favour of being clear about where we stand. Hasn't Premier Nawaz Sharif said clearly enough that our nuclear research programme, such as it is, remains unavailable as a bargaining chip? For the

moment that is what we see as the simple fact. If the suspended aid is tied to our surrender, there still are not many in this country to bite this bait.

### **Letter to UN Chief Condemns Afghan Scud Attack**

*BK2504133691 Islamabad Domestic Service in English  
1100 GMT 25 Apr 91*

[Text] Pakistan has brought to the attention of the United Nations the Kabul regime's barbaric Scud missile attack against the city of Asadabad in Konarha Province on Sunday [21 April], killing and injuring hundreds of civilians. In a letter to Secretary General Perez de Cuellar, Ambassador Jamshed Marker again urged him to use his influence in stopping such attacks that damage the prospects of a political settlement in Afghanistan. The Pakistani Government condemns this criminal use of weapons of mass destruction perpetrated by the Kabul regime against the Afghan population. Mr. Marker said such acts directly affect Pakistan [words indistinct] of Afghan refugees.

### **Sharif Says 'No Compromise' on Nuclear Program**

#### **Addresses Public Rally**

*BK2704151591 Islamabad Domestic Service in Urdu  
1400 GMT 27 Apr 91*

[Text] The prime minister has expressed his regret and anguish over the ongoing bloodshed in occupied Kashmir and said that Pakistan highly values the great sacrifices being made by the Kashmiri freedom fighters. He was addressing a mammoth public rally in Bannu today. Referring to the just struggle of the freedom fighters in occupied Kashmir, Nawaz Sharif called upon the superpowers to display the same spirit as they did during the liberation of Kuwait so that the UN resolution on Kashmir is implemented.

On the country's peaceful nuclear program, the prime minister categorically reiterated that no compromise will ever be made on this program. Pakistan will not bow to any external pressure and will not let the national prestige and dignity be impaired.

He expressed the confidence that lawlessness and all social evils will be rooted out with the implementation of the Islamic law.

Nawaz Sharif reaffirmed his government's commitment to fully meet the aspirations and expectations of the people and speedily solve all their problems. He added that concrete steps are being taken to make Pakistan a self-reliant country.

### **President Rules Out Inspection**

*BK2904094291 Islamabad THE MUSLIM in English  
29 Apr 91 p 1*

[Text] Islamabad, April 28—President Ghulam Ishaq Khan today asserted that Pakistan's nuclear programme was research oriented and we would not unilaterally open it for international inspection.

The President was replying to a question in the background of Ms. Benazir Bhutto's statement in which she emphasised the need for non-proliferation.

The President said he has not seen the former Prime Minister's statement. He said nuclear facilities are not open shops, whereas anybody can walk in and do shopping.

Ghulam Ishaq Khan said there are many countries who are running nuclear research programmes for peaceful purposes or otherwise, and posed the question that have they opened their programme for international inspection. No country runs its nuclear programme openly, he added.

### **President Urges Regional Approach to Nonproliferation**

*BK0105163491 Islamabad Domestic Service in English  
1600 GMT 1 May 91*

[Text] The president, Mr. Ghulam Ishaq Khan, has said Pakistan believes a regional approach to nuclear nonproliferation is the most feasible and effective means to resolve this issue in the South Asian region. This he said in a message read out at the inaugural session of the first national conference on physical and (?biological) consequences of nuclear war in Islamabad today. The president said they were committed to the cause of nuclear nonproliferation and were consistently supporting the efforts to check the spread of nuclear weapons.

### **President on Nuclear Weapons, Disarmament**

*BK0305101391 Islamabad THE MUSLIM  
in English 3 May 91 p 12*

[Text] Islamabad, May 2—President Ghulam Ishaq Khan reiterated Pakistan's stand on reversing the nuclear arms race and promoting complete disarmament. In a message read out at the first national conference of Pakistan physicians for the prevention of nuclear war, he said that "Pakistan had recently joined the countries which have formally requested for convening of an amendment conference to convert the treaty banning nuclear weapon tests in atmosphere, in outer space and under water into a comprehensive Nuclear Test Ban Treaty. [quotation marks as published]

The President said: "Pending nuclear disarmament, we are committed to the goal of nuclear non-proliferation and have consistently supported international efforts to check both the vertical and horizontal spread of nuclear weapons. We believe that regional approach to nuclear

non-proliferation is the most feasible and effective means to resolve this issue in our own region. In the context of South Asian region, Pakistan has made a number of equitable proposals to India, notably the establishment of a nuclear-weapon free zone in South Asia and a bilateral or original nuclear test ban treaty, to keep our region free of nuclear weapons."

The message said that Pakistan was encouraged by the conclusion of an agreement between Pakistan and India last year for not attacking each other's nuclear installations "as an important step towards building up of confidence and strengthening security in the region." It added that Pakistan was prepared to consider any equitable and nondiscriminatory proposal for keeping South Asia free of nuclear weapons.

President Ghulam Ishaq said Pakistan was encouraged by the INF Treaty between US and USSR. "We hope that this commendable step would be followed by agreement for substantial reductions in the strategic nuclear arsenals of the two superpowers leading ultimately to the total elimination of nuclear weapons."

The President in his message said that Pakistan was a peace-loving country and had been advocating general and complete disarmament.

He congratulated the "Pakistan physicians for the prevention of nuclear war" on marking efforts to educate the people on the disastrous consequences of nuclear war.

#### **French Envoy on Nuclear Power Plant Talks**

*BK0305101791 Islamabad THE MUSLIM in English  
3 May 91 p 1*

[Text] Karachi, May 2—The French ambassador to Pakistan, Jean-Pierre Masset, has said that his country is aware of the energy requirements of a developing country like Pakistan.

Replying to a question regarding the supply of nuclear power plant to Pakistan at the Pakistan Institute of International Affairs here Thursday [2 May] he said that "it was very difficult to answer that question because it involved very complicated issues".

The ambassador said that "there were three different aspects attached to the status of supplying power plant. One of them is the issue of reprocessing plant, which was delayed for various reasons. However, he mentioned that his government was not responsible for slow down of the discussions".

"The financial problem is also one of the major hurdles, responsible for delay", he said. The French government according to him, could not give two to three billion dollars to Pakistan as gift. Pakistan [was] to arrange funds for the plant, he added.

The third major issue is the non-proliferation aspect attached to this deal. Pakistan's intentions to sign the treaty would help accelerate this deal", [quotation marks as published] he added.

Talking on Pakistan and French relations, he said that both the countries enjoy good relations and there were all the reasons to have good terms. He said that the leaders of the two nations have been visiting each other and both the countries enjoy good trade ties.

Under the last financial protocol signed between the two governments, France extended a soft loan of 140 million dollars to Pakistan, he said.

The ambassador said that his country has high esteem of Pakistan's capabilities.

Masset said that France was the fourth exporting power enjoying balanced economy with sound industrial and agricultural sectors. He, however, regretted that the image of French people was not projected as they liked to be.

He said that his country had no territorial plans nor had an enemy. Democracy was flourishing in a peace loving country. Human rights were dear to the French people and they are more open, he added.

#### **Editorial Commends Sharif on Nuclear Issue**

*BK0705052791 Karachi DAWN in English  
5 May 91 p 11*

[Editorial: "A Correct Stance"]

[Text] Prime Minister Mian Mohammad Nawaz Sharif's assertion that Pakistan will continue its nuclear programme irrespective of all considerations has much to commend it. He told an Indian journal that the programme was Pakistan's "internal matter". Since there is a connection between Pakistan's nuclear plans and the suspension of the US aid, the Prime Minister said that Pakistan was "not very upset" about it and that Islamabad had not requested Washington for its revival. Ever since the Afghanistan issue went on the backburner, Pakistan's modest nuclear programme has suddenly become a disruptive factor in Washington's relationship with Islamabad. The yearly certification which the White House used to issue without much bother is now conspicuous by its absence, even though there is no material change in Pakistan's nuclear programme. No expansion worth the name has taken place in its nuclear facilities, and the programme continues to be of a peaceful nature. The only development of any significance is Islamabad's move to acquire nuclear plants from China and France. While an agreement with Beijing has already been signed, that with Paris is still under negotiation. A purchase deal with the latter has become difficult because of the abortive arrangements for the supply of a reprocessing plant in the '70s.

The question now is one of assuaging the American apprehension about the nature and orientation of the

country's nuclear capability and not one of disbanding or even whittling down the nuclear programme. At its present level, Pakistan's nuclear facilities do not pose a threat to anyone. Successive governments have repeatedly said that Islamabad has no intention of manufacturing nuclear weapons. This, despite the fact that India tested a nuclear device as far back as 1974 and has feverishly pursued a nuclear weapons programme. Its own capacity to manufacture nuclear equipment is enormous: it even has fabricated an indigenous fast-breeder reactor which can supply enough plutonium for New Delhi to have a stockpile of nuclear weapons. Pakistan has no nuclear reactor in the accepted sense of the term. KANUPP [Karachi Nuclear Power Project], installed by Canada, is a small facility that produces electricity for Karachi, while PINSTECH [Pakistan Institute of Nuclear Science and Technology] in Islamabad has a small reactor for research purposes. The only nuclear facility which is bothering some people is the one at Kahuta. Its capability has been blown out of proportion by a section of biased Western media men and lobbyists to sustain the bogey of an "Islamic bomb".

The fact is that a hugely energy-deficit country like Pakistan has no option but to develop its nuclear potential for power. Pakistan has also lagged behind in developing all its conventional energy sources. Even though proven reserves of oil have been placed at 108.94 million US barrels, the country actually produces less than half of its oil requirements. The heavy dependence on imported oil takes up a large portion of the country's scarce foreign exchange. The fall in home remittances, the continued rise in oil prices and a stagnant level of export earnings have combined to put an extraordinary strain on the country's foreign exchange position. Other sources of energy—coal, gas and hydroelectric—remain yet to be fully tapped, and undeniably our performance in this sector could have been better. For the future, however, what is needed is a comprehensive energy programme providing for the development of both the conventional sources of energy and the much-needed nuclear technology. Neglecting either will mean a difficult energy situation at a time when the demand for power is fast expanding, given the high birth rate and the country's developmental imperatives. The Prime Minister put it candidly when he said: "Aid or no aid, we should mind our own business. We have said many times that our nuclear programme is for peaceful purposes... We will not go and give an account on this" to anyone. The blunt tone has obviously to do with a conviction of the national energy compulsion rather than a confrontational posture on the nuclear issue as such. Pakistan and American have always maintained a fairly good and constructive relationship; it should stay that way. Afghanistan may be behind us, but hosts of other common interests in the region still tie us. It would be a

pity if any serious misunderstanding on the nuclear question were to mar this relationship.

#### **Bhutto: Nuclear Testing Would Isolate Country**

*BK0705004691 Hong Kong AFP in English 1729 GMT 6 May 91*

[Text] Karachi, May 6 (AFP)—Pakistan's former prime minister Benazir Bhutto said here Monday that nuclear testing would isolate Pakistan and called for a regional approach to prevent nuclear proliferation in South Asia.

"Although Pakistan has the knowledge, it is not appropriate to undertake detonation because it would isolate us... and increase threats to our security," Ms. Bhutto told reporters at her seaside residence here.

"Before the pressure for detonation mounts, there must be a regional solution," she said, adding that "such a solution can not be achieved by singling out Pakistan for discriminatory treatment."

This was an apparent reference to a demand that Pakistan sign the Nuclear Non-Proliferation Treaty. Islamabad has agreed to sign the treaty, but only if India follows suit.

The United States cut off about 600 million dollars in economic and military assistance in October on suspicions that Islamabad's nuclear programme was geared to military purposes.

Ms. Bhutto, who returned Monday from a three-week foreign tour, also called for "mutual arms reductions between Pakistan and India," adding, however, that this objective could not be achieved by expecting Pakistan to curtail its strength unilaterally.

Ms. Bhutto also expressed deep sorrow over the tragedy in Bangladesh where 126,000 people are feared to have died in last week's cyclone. She said the tragedy was a reminder of the need to channel resources away from military needs and into development.

#### **Measures To Safeguard Nuclear Installations**

*BK1105161491 Islamabad Domestic Service in Urdu 1500 GMT 11 May 91*

[Excerpt] The government has taken all possible measures to protect the country's nuclear installations from any attack. This assurance was given by Chaudhary Amir Hussain, the minister of state for law and parliamentary affairs, while speaking at an adjournment motion in the Senate today. The motion was sought to be moved by Professor Khurshid Ahmad. The minister of state said the government is fully aware of the situation. After the minister's statement, the mover did not press his motion. [passage omitted]



### Gremitskikh Views DPRK Nuclear Issues

*LD1804174791 Moscow TASS in English 1723 GMT  
18 Apr 91*

[By TASS diplomatic correspondents Sergey Postanogov, Sergey Ryabikin and Sergey Nikishov]

[Text] Moscow April 18 TASS—The Soviet Union favours the earliest possible signing of an agreement between North Korea and the International Atomic Energy Agency (IAEA) to put under the agency's control all elements of Pyongyang's nuclear activities, Soviet Foreign Ministry spokesman Yuriy Gremitskikh told a briefing here today.

Prospects for Soviet cooperation with North Korea will depend on this agreement, the spokesman added.

He dealt with this question in connection with suggestions by some analysts that the South Korean side will raise the question on Soviet nuclear fuel deliveries for nuclear facilities in North Korea at the upcoming meeting between South Korean President No Tae-u and Soviet President Mikhail Gorbachev on Cheju island.

Gremitskikh noted that one nuclear reactor, built in North Korea in 1964 with Soviet assistance, has been under the IAEA's control for a long time. The Soviet Union supplies nuclear fuel for the reactor in strict conformity both with the non-proliferation treaty and the IAEA charter.

As for the allegations about Soviet deliveries of plutonium to North Korea, the spokesman said that "the Soviet Union has not made such deliveries either to North Korea or any other country."

### Issue of Hungary-Based Nuclear Arms Considered

*LD2804123391 Moscow All-Union Radio Mayak  
Network in Russian 0730 GMT 28 Apr 91*

[Text] The USSR Defense Ministry published a statement this week confirming that nuclear weapons had for several years been at the disposal of the southern group of Soviet forces stationed on Hungarian soil. This admission followed a clamorous campaign in the Hungarian press, started by NEPSZABADSAG. Here is a report by Sergey Shalygin, our Budapest correspondent.

[Shalygin] Last Monday the newspaper carried an interview with Karoly Grosz, former prime minister of the Hungarian People's Republic. He recalled that he had seen a document signed by Janos Kadar agreeing to the stationing of Soviet nuclear warheads in the territory of Hungary. During his first official visit to Moscow, Karoly Grosz requested the Soviet leadership to withdraw the nuclear weapons there. A few months later this was done. True, Miklos Nemeth, who succeeded Grosz as head of government, claims that the Soviet Union was fulfilling his request and not the promise given his predecessor.

However, this verbal skirmish in the struggle to be the first in no way alters the fact that Hungary, as a country on whose territory nuclear weapons were sited, had naturally been a target for NATO missiles and bombers equipped with armaments to neutralize weapons of mass destruction. Even finding out about this after the event, any Hungarian will sigh with relief when he calls to mind the withdrawal of Soviet troops from his country, which is nearing completion.

Incidentally, Hungarian specialists and my journalistic colleagues have examined the presumed nuclear weapons storage facilities which have been given up. It has been ascertained that there has been no radiation there previously or now.

The only thing that remains unknown is when these weapons might have been introduced into the country. One of the heroes of the 1956 revolution, Lieutenant General Bela Kiraly, who is now a deputy of Hungary's state assembly, considers that 35 years ago the Soviet troops did not want to leave the country precisely because they would thereby have to be deprived of one of the locations for the forward basing of nuclear weapons in Europe. But that is a thing of the past. At the present time Bela Kiraly expresses some perplexity over why Karoly Grosz, a former leader of the Socialist Workers' Party and the government, needed to make a fact that was known to the whole world the subject of such broad discussion. The country will derive no benefit from this, the general stressed. We are keeping an open door to the West, but this does not mean that we are closing it to the East.

### Commentator Assesses Nuclear Tension on Korean Peninsula

*SK0205023591 Moscow International Service  
in Korean 1330 GMT 30 Apr 91*

[Station commentator Oleg Alekseyev commentary from the "Today's World" program]

[Text] Speaking to the 85th Inter-Parliamentary Union [IPU] meeting now being held in Pyongyang, DPRK President Kim Il-song has said that the Korean Peninsula must be turned into a nuclear-free zone. This is not the first time Pyongyang advanced a proposal to turn the Korean Peninsula into a nuclear-free zone, said our station commentator Oleg Alekseyev.

This issue is an urgent matter. This is because the U.S. forces based in South Korea, on the peninsula, have a massive stockpile of nuclear weapons. It is a well-known fact that approximately 1,000 nuclear warheads are concentrated in the South. Considering the continued tension on the Korean Peninsula, it is needless to say how dangerous these stockpiles of nuclear weapons are.

Considering the positive changes in the world, Washington adopted a decision last year that the U.S. troops in the South of the Korean Peninsula would be reduced to a certain extent. As of today, 43,000 troops are being

stationed. By 1993, the forces will be reduced by 7,000. I have not heard that portions, at least, of nuclear weapons that are stockpiled by the U.S. forces would be withdrawn from the South.

It is naive to expect that Washington and Seoul would make an affirmative response to the proposal which Kim Il-song advanced in Pyongyang. Mistrust which has accumulated over scores of years remains strong. Therefore, it is correct to say that such an issue can be resolved easily. The issue concerning international inspection of the DPRK's nuclear facilities has been unresolved. Under these circumstances, it will be very difficult to agree on any reasonable measure to achieve military and political detente on the Korean Peninsula.

However, there are also reasons to be optimistic about the situation. First of all, the fact that Seoul and Pyongyang have expressed their willingness to resume government-level dialogue, which began last year, is one reason. As is known, Pyongyang suspended this dialogue a short while ago on the grounds that the ROK and the United States have persisted in the Team Spirit exercise.

Speaking to the opening session of the meeting, the DPRK president pointed out that Pyongyang is willing to resume the North-South premier-level dialogue. Also, it is very symbolic that the ROK parliamentarian delegation is participating in this IPU meeting. Such participation was unthinkable just a few while ago.

### Press Reports on Topaz Reactor Imbroglia

91UF0724A Moscow IZVESTIYA in Russian  
7 May 91 Union Edition p 2

[Article by S. Leskov: "The Adventures of a Soviet Reactor in America"]

[Text] A few days ago IZVESTIYA (No. 96, 1991) reported that the Soviet Topaz-2 nuclear reactor model, which had been exhibited at the international fair in Albuquerque, had been prohibited from being taken out of the United States. The situation is, by all counts, extraordinary. We already reported on the U.S. side's reaction. What is our specialists' opinion of the events?

"During the last few months, there were political games played around Topaz-2—by both sides," N. Ponomarev-Sedoy, first deputy director of the Kurchatov Nuclear Power Institute, expressed his view on the incident. "The victims of such games are both the business and specific people. As before—when a Soviet reactor caused a burst of attention by its alleged potential for use in the SDI program—I do not see any reasons to sound alarms."

Could it be that while Topaz-2 is forcibly detained on the other side of the ocean the Americans will pry out some design secrets? N. Ponomarev-Sedoy assured us that the reactor is in a container sealed by our specialists. In general, N. Ponomarev-Sedoy believes there is no need to rush Topaz-2's return home. The reactor is currently

being exhibited at various international fairs. At the same time, there are no resources or appropriate buildings at home to store such a unit properly. Nevertheless, if the issue of the unit's return to the USSR is not resolved in a positive manner, we are not going to leave this "gift" to the United States—the reactor will simply be destroyed.

Still, it is necessary to draw some lessons from the events. One may throw a stone at the American bureaucracy that slapped a veto on the export of nuclear devices, even on their way home. American nuclear scientists are now saying with a guilty feeling that their bureaucracy turned out to be no better than our Soviet one. But it will not do us any good to discuss the merits of someone else's bureaucracy. If we are serious about cooperation with the United States, it would not hurt to learn some of the laws of that country, especially 40-year-old ones. However, it did not occur to anybody to figure out foreign laws. Our delegation in Albuquerque learned about potential problems with the reactor's return only in January, after the unit had already been delivered to the United States.

Alarmed dispatches from across the ocean about the reactor's "arrest" did not turn out to be news for our specialists. What did they hope for? We received a guarantee in January—verbally—that the lawyers will find a loophole in American legislation that will allow this paradoxical situation to be resolved. But time goes on, and a loophole has not been found. Just recently, representatives of the Nuclear Regulatory Commission visited Moscow. In their opinion, there is only one chance left: to bring the question up at the highest political level, and to ask the administration for a one-time permit to export the unit back to the USSR.

And, perhaps, the most important point: Will not all these troubles influence the Americans' intentions to buy the Soviet reactor? This is not something we are indifferent to—the approximate value of the contract is \$10 million, which would come in very handy in the situation where budget financing for work in this prospective area has been cut. Currently, a version of the contract signed by the American side has been passed to Moscow. By the way, the contract stipulates the return of the industrial prototype to the USSR. But if such legal possibilities were there from the beginning, it is hard to understand why they were not used to export an exhibition model?

One way or the other, after the necessary clarifications were made, even the strictest Soviet authorities approved the contract. The delay is in the Ministry of Defense. Many years ago this department cut the financing for Topaz and lost all interest in it. Now they propose—as is typical here—to create a commission: Such a process can go on for years. It should be emphasized that authoritative specialists in both the United States and the USSR believe in principle, based on its technical characteristics, that Topaz-2 cannot be used for the SDI program—if for no other reason, then because

the unit's technology is on the level of 15 years ago. Besides, the contract for the purchase of the reactor stipulates firm guarantees on the part of the American side that the unit will not be used for military purposes. Another point is that, according to the contract, the reactor's "know-how" is not to be violated—the unit cannot be dismantled.

Still, it is hard to say whose bureaucracy is worse. Research in space nuclear reactors, deprived of domestic financing and financial support from abroad, is facing a sad fate. Scientists in the Nuclear Power Institute involved in the Topaz project are already experiencing financial difficulties, such as meeting the payroll. And this is in one of the rare areas where we hold an advantage—space nuclear devices.

### **U.S. Nuclear Arms Withdrawal From ROK Viewed**

*SK1305051391 Moscow Radio Moscow in Korean 1200 GMT 11 May 91*

[Sergey Petrov commentary from the "Focus on Asia" program]

[Text] The United States has been studying the possibility of withdrawing all nuclear weapons from the ROK. Quoting military sources, SEOUL SINMUN and CHUNGANG ILBO have reported on this. Our station commentator Sergey Petrov writes:

Many more signs of change in the U.S. Administration's policy toward the Korean Peninsula are showing than ever before. These include moves toward reducing the U.S. military presence and the reported agreement to hold soccer matches in Pyongyang between U.S. and DPRK players.

In its report, CHUNGANG ILBO indirectly hinted that the White House appears to be changing its positions. No U.S. officials have confirmed this.

While the situation has been continuously improving on the Korean Peninsula, the North-South premiers' talks have not yet been resumed. The ROK has recently been undergoing a most serious social and political crisis as antigovernment demonstrations spread. The North and South have been bickering over Seoul's plan to apply for the UN admission. Also, Pyongyang has been unwilling to place its research reactors under the control of the International Atomic Energy Agency.

Therefore, particular attention has been focused on the reported plan to withdraw nuclear weapons. However, if [words indistinct], the removal of nuclear weapons will not help fundamentally change the situation. The problem is that U.S. nuclear weapons in the ROK include mines, bombs, Lance and Honest John missiles, and neutron shells. As CHUNGANG ILBO reported, it is planned to replace all these with ultramodern missiles. This will be [words indistinct] of the U.S. 7th Fleet in the Pacific. These missiles will have longer ranges, be more

precise, and be loaded with more powerful warheads. Moreover, the 7th Fleet could and can make unrestricted calls at ROK and Japanese ports. Washington's position on whether U.S. military ships are loaded with nuclear weapons is well known. Under no circumstances will Washington make an affirmative reply. In other words, they are or are not loaded with nuclear weapons. This is not a frank reply. This is because nuclear weapons are not of a tactical nature but of a strategic nature on the Korean Peninsula.

My experiences tells me that U.S. nuclear weapons have lost their significance here as in Europe. Nuclear accidents have occurred in Chernobyl and other places. Only those who are suicidal would try to attack or defend with the use of these brutal weapons. Washington surely knows this very well in view of the fact that it has decided to reconsider its military principles toward the Korean Peninsula. I believe that the United States will take responsible measures to massively reduce its military presence in the ROK and to soon withdraw nuclear weapons from the ROK.

### **TASS Views Bush Statement on Chemical Arms**

*LD1405214191 Moscow TASS in English 2125 GMT 14 May 91*

[By TASS analyst Vladimir Bogachev]

[Text] Moscow May 14 TASS—President Bush on Monday made an important statement concerning changes in the U.S. policy with respect to chemical weapons. He made it clear that the United States was lifting its reservation regarding the 1925 Geneva Protocol banning the use of toxic agents during wars. The United States reserved the right to use toxic agents in response to a chemical weapon attack.

In addition, the U.S. President made clear that the United States would no longer insist on retaining two per cent of its present stock of chemical weapons—500 tonnes—after signing the chemical weapon convention that is currently being worked out in Geneva.

These decisions by Washington will take effect after the chemical weapons convention is enforced.

The history of chemical weapons negotiations is replete with dramatic events which now inspired hopes for a complete ban on this mass destruction weapons and now caused bitter disappointment. In 1968, the United States stopped the production of toxic agents but the Soviet Union failed to follow the example. Later, the two powers exchanged roles: in 1987, the Soviet Union halted the production of toxic agents but the United States started the output of binary toxic agents, a new kind of chemical weapon.

Chemical weapons negotiations progress was hampered by two interdependent factors—objective arising from the difficulties of verification and subjective rooted in

the long-term mistrust between the USSR and the U.S. dating from the cold war years.

The U.S. military for a long time was opposed to the ban on chemical toxic agents as they were sure that the United States was too far removed from potential theatres of war in Europe and Asia and chemical weapons were no threat to the country.

The Soviet Union's practical large-scale measures aiming to reduce the level of military confrontation in Europe thawed the ice of mutual mistrust to a considerable degree. During the Soviet-U.S. summit off Malta, the U.S. President announced that the United States was ready to end the production of binary ammunition and later at the Washington summit the production of all toxic agents. An agreement was reached on a step-by-step liquidation of 98 per cent of the chemical weapon stocks in the Soviet Union and the United States and reducing them to the same level in both countries by the year 2002.

In July 1990, the United States began to withdraw its chemical weapons from German territory. Nevertheless, the work of representatives of 39 countries in Geneva to prepare a convention on a complete ban of chemical weapons and the elimination of stocks proceeded at a slow pace. Washington officials now admit that the Geneva negotiation process was being slowed down by

the U.S. refusal to agree to a complete elimination of its chemical potential. Now, at long last, this obstacle will be removed.

It is appropriate to recall George Bush's statement in 1988, in which he said that if elected president, he would be remembered for one thing—a complete and comprehensive ban on chemical weapons. By far not all U.S. presidents have kept their election promises concerning arms control. There is every ground to believe that Bush's statement about chemical weapons was quite sincere.

As regards the Soviet Union, this country has never used toxic agents, deployed chemical weapons beyond its own territory or transferred chemical weapons to other countries. The Soviet Union favours the prompt adoption of a convention banning these mass destruction weapons and the complete elimination of stocks under close international scrutiny.

Some of the problems concerning chemical weapons are still awaiting their solution at Geneva negotiations. The position of some countries, including France, is not yet quite clear with regard to the proposal to fully eliminate all toxic agents in the next ten years.

However, hope is still alive that chemical weapons will be finally outlawed soon, for instance by the first half of 1992.

## FINLAND

### Polls: Increasing Support for Nuclear Plants

91EN0468A Helsinki HELSINGIN SANOMAT  
in Finnish 24 Mar 91 p 5

[Text] The majority of Finns consider nuclear power plants to be completely or fairly safe. One-half of the population is against building a fifth nuclear reactor; however, the number of those who favor the construction of more nuclear power plants has increased lately.

These conclusions can be drawn from an opinion poll conducted by Gallup of Finland for HELSINGIN SANOMAT in the last week of February.

Gallup has investigated the Finns' attitudes toward the safety of nuclear plants since 1978. Since the fall of 1988, people's confidence in the safety of nuclear plants has increased, and it has never been as great as at present.

Attitudes toward building a new reactor—"a fifth nuclear power plant," as it is commonly called—have changed since 1988 and are now less negative.

Both views are almost equally represented at this time: 46 percent are in favor and 51 percent against a fifth nuclear plant. However, the number of unconditional opponents is larger than that of unconditional supporters. The number of unconditional supporters has not changed from last fall.

The 1,598 respondents were chosen to represent the over-18-year-old Finnish population in the active labor force, with the Aland Islands excluded.

### Men Trust Nuclear Plants

Nearly one out of every two respondents—48 percent—considered nuclear plants to be "fairly safe," while 7 percent considered them "completely safe." The alternative "not very safe" was chosen by 29 percent, and "not at all safe" by 14 percent of the respondents.

Only 2 percent had no opinion on the issue of safety, and, on the issue of a new nuclear plant, 4 percent had no opinion.

Men's and women's opinions were clearly divided. Two out of three men considered nuclear plants to be "completely or fairly safe," and a distinct majority had positive attitudes toward building another nuclear plant.

Of women, clearly less than 50 percent believed the plants to be safe, and only one-third were inclined to favor an additional nuclear power plant.

### Conservatives More Supportive

On the political spectrum, Conservatives were obviously more ready to accept another nuclear plant. Four out of five Conservatives considered nuclear plants to be at least fairly safe, and three out of four supported plans for a fifth nuclear plant—as many as 50 percent did so unconditionally.

Also, a majority of SDP [Social Democratic Party], the Left Alliance, and RKP [Swedish People's Party] supporters believed, at least with reservations, in the safety of nuclear power plants.

However, a majority of the supporters of most political parties were against a new plant. Within the SDP constituency, the opponents and supporters of a new plant were about equally divided.

Of the respondents who identified themselves as supporters of the Green Alliance, less than 50 percent considered nuclear plants to be "fairly safe," 17 percent held them to be "not at all safe," and 36 percent indicated that they are "not very safe."

A clear majority of the Greens' supporters were opposed to building a new plant; somewhat more than 25 percent were in favor of it, at least with reservations.

### Rural People Oppose New Reactor

The greatest confidence in nuclear power was expressed in southern parts of Finland. Urban dwellers believed in their safety more than rural people, and they were also somewhat more favorable toward the construction of a new plant.

People with the most formal education held nuclear power to be a good and safe alternative more often than less-educated people.

Along occupational lines, private entrepreneurs and upper management personnel were more likely to support nuclear power. Farmers were particularly distrustful of nuclear power and opposed new construction.

The most supporters of nuclear power could be found among over-50-year-old people in the active labor force. Old-age pensioners over 65, on the other hand, both doubted the safety of nuclear plants and opposed a new reactor more often than representatives of other age groups. The opinions of under-25-year-old respondents in the active labor force did not differ significantly from those in the other labor-force groups.

**Table 1**  
**Finnish Opinions on Nuclear Plant Safety**

	Percent of Respondents			
	1978	1987	September 1990	February 1991
Completely safe or fairly safe	43	40	51	55
Not very safe or not at all safe	52	57	47	43

The question was: "In the debate on the use of nuclear power, a lot of attention has centered on the issue of how safe nuclear plants are from the environmental standpoint. It has also been pointed out that no solution has yet been found regarding the transport and storage of the dangerous waste products created by the nuclear power plants. What is your impression of the safety of nuclear power plants?"

**Table 2**  
**Finnish Attitudes Toward Building Fifth Nuclear Power Plant**

	Percent of Respondents			
	January 1988	September 1988	September 1990	February 1991
In favor	13	18	15	24
Somewhat in favor	17	19	24	22
Somewhat opposed	19	22	26	20
Opposed	46	39	31	31

The question was: "Different views have been expressed in public on how the production of electricity should be expanded. One alternative is to construct more nuclear power plants. What is your attitude toward the possibility of building a fifth nuclear power plant in Finland? Do you support the idea or oppose it?"

## GERMANY

### Genscher Welcomes Bush Call for Chemical Weapons Ban

*LD1505081291 Berlin ADN in German 0715 GMT 15 May 91*

[Text] Bonn (ADN)—Foreign Minister Hans-Dietrich Genscher welcomed George Bush's call for a

disarmament conference in Geneva to decide on a worldwide ban on chemical weapons as a significant step toward banning these particularly horrible weapons of mass destruction. The Federal Government unreservedly supports the president's call to find a solution to all the important issues in Geneva by the end of this year and to bring the negotiations to a close within 12 months, said Genscher on Wednesday in Bonn. The German delegation to the Geneva disarmament conference, as coordinator this year, will do all it can to achieve this aim.

## SWEDEN

### Launch of Europe's Largest Rocket Fails

*LD0805110691 Stockholm Domestic Service in Swedish 1030 GMT 8 May 91*

[Text] The launching of the biggest rocket so far in Europe from Esrange, just outside Kiruna, failed this morning, Radio Norrbotten reports. The rocket broke into pieces at an altitude of 150 km and crashed. The reason for the crash is not known.

**EC-Wide Arms Export Controls Proposed**

91GE0222A Duesseldorf *HANDELSBLATT* in German  
25 Mar 91 p 3

[Report by gh: "Daimler-Benz CEO Asks Kohl and Delors To Back Uniform Arms Export Controls"]

[Text] Stuttgart—Edzard Reuter, the Daimler-Benz AG CEO, has called for a Europe-wide uniform export controls on defense or militarily useful goods, technologies, and services when the EC market goes into effect on 1 January 1993.

In the letter to Federal Chancellor Helmut Kohl and to the president of the EC Commission, Jacques Delors, Reuter has now submitted an initiative of his company to this effect, which was adopted by the Daimler-Benz AG board of directors.

According to it European export controls should be guided by the following principles:

- The contents of the regulations would have to be identical in all countries (directly established EC law). The uniformity of interpretation and application would have to be assured. Changes would have to go into effect simultaneously in all countries.
- In the interest of as efficient an administration as possible (the authorities being fully informed about the applicants, short processing times, easy prosecution of violations, etc.) the application of the uniform regulations should take place in as decentralized a manner as possible through the existing national agencies. For coordination and communication a European export control agency could be established.

—Decisions of these agencies would have to have EC-wide validity, so that the EC will become an internal market free of permits, but identical export permits would have to be valid at all external [EC] borders.

—The export control regulations would have to be exacting but unequivocal, clear and practicable for industry and public administration. This applies especially to the treatment of so-called dual-use goods.

—State agencies must also be prepared to assume responsibility. If sensitive goods are misused by enterprises in third countries or by third countries themselves, the EC must employ diplomatic or commercial policy instruments to help implement the aims of its export control regulations.

**Varying Regulations Are Not Acceptable**

In the opinion of Daimler-Benz, after introduction of the EC internal market such a uniform European export controls should be extended to all of western Europe in a next step. The export of sensitive goods, technologies, and services worldwide is subject to varying national regulations and procedures. This state of affairs stands in the way of a logical European security policy and is economically "intolerable" for the affected industry. A renunciation of the production of military goods would be incompatible with the democratic and constitutional defense mission, would lead to a factual and political dependence on foreign suppliers, and would inflict substantial damage on the economy. Implementation of restrictive regulations in only one country would have only a very limited effect on the world order as long as the other most important developed countries were not included.