New missile group for Agni-II induction

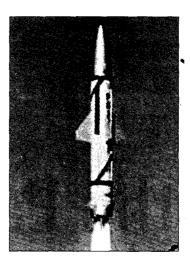
Vishal Thapar New Delhi, August 4

THE GOVERNMENT has decided to raise a second missile group for inducting the Agni-II Intermediate Range Ballistic Missiles. This group is expected to have Army and Air Force components, and will, effectively, be operationally in charge of the country's nuclear arsenal.

"India has already announced

"India has already announced the serial production of the 2,500 km Agni-II at the Hyderabadbased Bharat Dynamics Limited by early 2002, and the new missile group will be raised concurrently for the induction of the IRBMs into the Defence forces. Details of the command and control structure are under discussion", a Ministry of Defence source said.

India's first and only military group raised to handle nuclear missiles is the Secunderabadbased 333 Missile Group, which is manned by the Army. The 333 Missile Group is armed with the 150 km surface-to-surface shortrange ballistic missile (SRBM), Prithvi. It has not been deployed in an operational area. Although capable of carrying a nuclear



warhead, the Prithvi is not considered a "true" nuclear missile since it is only a tactical weapon on account of its short range. Hence, the new group will be the first one to handle "genuine" nuclear missiles of the Agni-II class, defence analysts infer.

Meanwhile, the DRDO has embarked upon re-testing the Dhanush, the Naval version of the Prithvi, after the monsoons. The first test-firing last year from

'NO GERMAN IMPORT'

INDIA HAS denied reports that it imported hydraulic cylinders from a German firm for the Agni missile project. Authorities in Bavaria last week raided the offices of a firm in Wuerzburg near Munich and reportedly confirmed links between the entity and the Agni project.

HTC, New Delhi

a Naval warship was unsuccessful. It's more difficult to perfect a Naval version of the SRBM, since the platform is unsteady on the high seas.

"The Dhanush is under development. It's test-firing is at an experimental stage, and there's no specific time frame for inducting the Agni into the Navy," a Defence spokesman said, refuting suggestions that the test-firing of the Dhanush last year was a "failure". But irrespective of the outcome of the test-firing of Dhanush, the Defence establishment has decided that this will not be the delivery vehicle for a nuclear weapon for the Navy sources said.

THE HINDUSTAN TIMES

"India's claim on Pokhran test incorrect"

NEW DELHI, JULY 22. The British defence scientists have dismissed India's claim that the Pokhran nuclear tests of May 1998 had a yield of 60 kilotons and have reopened a three-year old controversy.

The scientists, from Aldermaston Weapons establishment, have said the fission device and the thermonuclear bomb exploded in Pokhran had a combined yield which was close to 20 kilotons, implying that the thermonuclear device failed to explode fully.

In a report in *Current Science*, they said "there is no significant evidence" that the yield was nearly 60 kilotons as claimed by the Bhabha Atomic Research Centre. Their estimate supported the calculation of the two groups of American seismologists who had earlier said that the Indian bombs had a total explosive energy of 10-15 kilotons.

One possible reason for BARC's high estimate could be the smaller distance between stations in India. Conventional surface wave calculations break down at short distances, the report said. A more accurate yield estimate would be possible if the exact depth of explosions, details of the firing medium and water content of the rocks were known "but India has not released this information."

The British scientists said their analysis was based on data from 12 stations that recorded the seismic waves from Pokhran tests both on May 18, 1974, and May 11, 1998.

Responding to the report, the former chairman of the Atomic Energy Commission, Mr. Krishnagopala Iyengar, said he did not agree with its conclusions but believed that the thermoculear device tested at Pokhran hardly generated 8 kilotons of energy.

Speaking over phone from Mumbai, he said "that is why I have been saying that India should carry out more thermonuclear tests before signing the Comprehensive Test Ban Treaty."

Another former Chairman, AEC, and a key scientist behind the Pokhran tests, Mr. Rajagopalan Chidambaram, said BARC would "appropriately respond" to the report which "was incorrect." — PTI

n'India can build advanced n'reactors in two years'

By Our Science Correspondent

BANGALORE, JULY 21. Mr. Anil Kakodkar, Chairman, Atomic Energy Commission, said today that the Department of Atomic Energy was designing advanced pressurised heavy water reactors (PHWR) which could operate for 100 years.

Speaking to presspersons after inaugurating a workshop on "Safety of Nuclear Power Plant Structures" organised by the Department of Civil Engineering of the Indian Institute of Science here, he said these 220 MW reactors would have improved safety features with greater reliance on passive safety systems. The new reactors, for instance, would not have pumps for circulating the coolant water. Instead these reactors would rely on the natural circulation set up by the reactor core being hot.

"We could be in a position to begin construction of these reactors in about two years," he said in reply to a question. The department's aim was to have 9,100 MW of power generated from nuclear reactors by 2012. To achieve this goal, it was building a mix of 220 MW and 500 MW nuclear power plants.

In his inaugural address, Mr. Kakodkar pointed out that while India had world-class analytical capability in structural design, it was necessary to improve the facilities for experimental validation. At the moment, the only shake-table was at Roorkee and it was an old facility. The department had decided to establish a new facility in Chennai.

The department possessed one of the largest databases on fracture safety at the component level under normal and accident conditions. Possession of this database had made possible a link with an institute in Germany, he added.

Dr. S.B. Bhoje, Director of the Indira Gandhi Centre for Atomic Research at Kalpakkam, spoke about the challenges involved in designing the prototype fast breeder reactor so that it could operate safely and cope with abnormal accidents. A 13 MW Fast Breeder Test Reactor had been functioning at Kalpakkam since 1985. Work on the 500 MW prototype fast breeder reactor was expected to begin by December, and the plant was to be commissioned by

India was one of the first to institute a periodic safety review every 10 years for all nuclear power plants, said Dr. G.R. Srinivasan, vice-chairman, Atomic Energy Regulatory Board (AERB). On the basis of this review, the AERB granted permission for the plant to operate for the next 10 years.

Dr. Srinivasan said the establishment of the Russian nuclear reactors at Koodamkulam would give India greater access to Russian analysis and experience from their research institutions and laboratories. The policy for licensing a foreign nuclear power plant was that it should be licensable both in that country as well as in India, he pointed out

Centre urged to set up national cotton board

By Our Staff Reporter

COIMBATORE, JULY 21. A united forum of cotton growers, suppliers and consumers has requested the Centre to set up an apex body for the cotton industry called the National Cotton Board of India.

At a joint press conference here today, the Coimbatore Cotton Association president, Mr. Hiren. N. Desai, and adviser to the East India Cotton Association, Mr. Hemant Mulky, said the National Cotton Council of the U.S. was formed by farmers, financiers, suppliers and others.

Under the guidance of the U.S. board's Director, a similar set-up was proposed in India. The project was signed by representatives of all the related segments and sent to the Government for approval and participation in the board.

The annual All-India Cotton Trade Associations' Conference would be held here from July 27 to 29. For the first time, about 40 organisations of cotton traders from all over the country would discuss the problems faced by the sector.

The main issues likely to be taken up are huge imports, quality of domestic cotton, financial system in cotton trade, etc.

Supersonic, em missile testfired

STATESMAN NEWS SERVICE

OF THE STATESMAN NEWS SERVICE

BHUBANESWAR/NEW DELHI, June 12. – Defence scientists tested the Brahmos, a supersonic cruise missile, at Chandipur interim test range at 10.17 this morning. Brahmos is named after river Brahmos is named after river Brahmos is named Moscowick.

maputra and Moscow.

The 6.9-metre missile has a 280-km range and can be fired from ships, submarines, large aircraft and mobile launchers. Russian and DRDO scientists

have been interacting on the missile for about a year, and there are plans to extend its range. Had its range been longer, it would've come under Missile Technology Control Regime restrictions. More flight tests are being planned and regular production may begin regular production may begin in two years.

Indo-Russian missile tested By Atul Aneja Maria missile "is the first of its kind in the world" and will be simultaneon-hoard, computer. But to on-hoard computer. But to on-hoard computer. But to on-hoard computer.

NEW DELHI, JUNE 12. India and Russia today tested a state-of-the-art supersonic cruise missile, jointly developed, which may be unrivalled in the region.

The Defence Minister, Mr. Jaswant Singh, present at the Chandipur-on-sea test site, described the launch as a "landmark in technology partnership".

With a range of 280 km., the

missile "is the first of its kind in the world" and will be simultaneously inducted into Indian and Russian arsenals. It is expected to be inducted in the next two years after several additional tests. One of its striking features is that it can be launched from land by a mobile launcher, ship, submarine or aircraft to target warships at very long distances. The missile offers two main advantages. It is highly accurate and can be guided to its

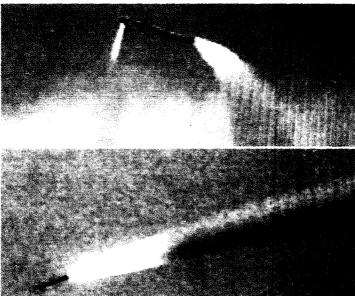
target mainly with the help of an on-board computer. But unlike several other cruise missiles, it travels at supersonic speed in a sea-skimming profile. Because of its high speed, provided by its two-stage engines, it can defeat most ship-borne anti-missile defences, greatly adding to its strike-power. Even the state-of-the-art Barak anti-missile system, which India is planning to induct, has a proven capability of downing only sub-sonic missiles.

The development of this missile system more than equalises China's supersonic anti-ship missiles. Indian security planners had been concerned about Beijing's Moskit anti-ship missiles boarded on the recently-acquired Soverameny class warships. Besides, China also plans to fix the Sunburn missile, aerial variant of the Moskit, on its Russian-built SU-27 planes. With the supersonic cruise missile, India will be able to deter forays by Chinese warships, especially in the Indian Ocean.

President, PM hail test PTI reports:

The President, Mr. K. R. Narayanan, and the Prime Minister, Mr. Atal Behari Vajpayee, today congratulated the Indian and Russian scientists for the feat.

In a message from Mumbai's Breach candy Hospital, Mr. Vajpayee congratulating the scientists said New Delhi would, however, continue to preach the doctrine of universal peace.



'PJ-10', a joint Indo-Russian venture of 'supersonic cruise' missile, first of its kind in the world, with multiple launch platforms capability and having a strike range of 280 km being test-fired from the Interim Test Range at Orissa's Chandipur-on-sea, on Tuesday. — PTI

No dispute with Russia on NMD: Jaswant Moscow Moscow The ABM treaty is a bilateral agreement signed

N A bid to allay Russia's apprehensions about India's stand on the controversial US move to create a National Missile Defence (NMD) system, Indian defence minister Jaswant Singh said there were no differences between New Delhi and Moscow on the issue.

Mr Singh, who was in Russia for the first meeting of the Indo-Russian joint commission on defence cooperation, re-iterated that India was opposed to any move that would lead to the unilateral abrogation of the Anti-Ballistic Missile (ABM) treaty signed by Moscow and Washington in 1972. He called for global efforts to create a new security framework.

"There is no difference between India and Russia on the (NMD) issue," Mr Singh said. "It is the press that has blown the issue out of proportion."

India has supported elements of the NMD programme, with Mr Singh saying recently that it marked a departure from the "confrontations of the Cold War era" by creating a new global security framework. But Russia is opposed to



IN SYNC: Russian President Vladimir Putin with foreign minister Jaswant Singh in Moscow on Wednesday. — AP the initiative, saying it will violate the ABM

treaty.

"The confrontationist attitude of the Cold War era should be abandoned and the world should move towards a new security framework through joint efforts," said Mr Singh.

"The ABM treaty is a bilateral agreement signed by Moscow and Washington that should not be abrogated unilaterally. We have not supported the US proposal for building the NMD system and we are in constant touch with Russia on the issue."

Any unilateral abrogation of the ABM treaty will cause strategic instability and that is why a decision on the NMD issue should be taken in consultation with Russia, Mr Singh stressed.

Mr Singh's talks with Russian leaders, including defence minister Sergei Ivanov, have resulted in the narrowing down of differences on the NMD issue.

The Indian defence minister has succeeded in dispelling Moscow's apprehensions, observers said. The NMD issue also figured in talks between Mr Singh and Russian foreign minister Igor Ivanov.

"The views of Russia and India on the issue of international security and strategic stability are either identical or they fully coincide with each other," said Mr Sergei Ivanov after his meeting with Mr Singh.

— IAN

The Economic Times

Govt clears Agni-II production HT Correspondent New Delhi, May 31 THE GOVERNMENT has given the go-ahead for serial production HT Correspondent New Delhi, May 31 Success on April 11, 1999 an January 10, 2001, as part of the DRDO's Integrated Guided Missile Development Programm the Parliamentary Consultative (IGDMP) A Defence Minister (IGDMP

the go-ahead for serial production of the Agni-II intermediate range ballistic missile.

The IRBM will be India's first strategic missile fit to carry a nuclear warhead, and will have a range of about 2,500 km.

Production and subsequent deployment of the missile will be the nation's first step towards achieving the objective of a "credible minimum deter-rent" declared in its draft nuclear doctrine.

The decision on the serial production of Agni-II at the

the Parliamentary Consultative Committee attached to the Ministry of Defence.

This declaration was made This declaration was made along with the release of the Defence Ministry's annual report for the year 2000-2001. Significantly, the report says, "asymmetry in terms of nuclear forces is strongly in favour of China which additionally has helped Pakistan to build missile and nuclear canabuild missile and nuclear capability"

The indigenously developed Agni-II was test-fired twice with success on April 11, 1999 and January 10, 2001, as part of the DRDO's Integrated Guided Missile Development Programme (IGDMP). A Defence Ministry press release said Jaswant Singh had told the Parliamentary Committee that induction of the missile system into the armed forces "is being planned during 2001-2002"

It is expected to be inducted into the nuclear forces command, which is being established under the proposed Chief of Defence Staff (CDS) set-up in the reorganised defence management structure suggested by the Group of Ministers, which reviewed national security.

MINIMUS TO THE PLANTING THE PLA

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Govt. plugging gaps in nuclear arsenal

By Atul Aneja

NEW DELHI, JONE 1. India's declaration that it will induct Agni-II missile within a year is part of an effort to plug the gaps in its nuclear arsenal.

The nuclear-tipped Agni-II, with a range of over 2000 km, will become the bedrock of India's nuclear deterrent till a missile with a longer range is made available. The security establishment, however, is well aware that much more needs to be done to develop the small, but survivable, nuclear arsenal, highly-placed Government sources say.

The list of items which could add credibility to a "minimum deterrent" includes a nuclear submarine and related weaponry as well as strategic bombers. Some fighter aircraft, which are already with the Indian Air Force, can deliver nuclear weapons. In fact, the IAF has been reportedly practising manoeuvres to deliver nuclear weapons since 1986.

Along with Agni-II, security planners are focussing their attention on developing the Advanced Technology Vessel or the nuclear submarine. In developing it, ecientists have been grappling with the problem of acquiring suitable engines. The key lies in miniaturising a powerful nuclear engine which integrates well with the submarine's large titanium hull. The Government, however, appears to be addressing this problem innovatively and this may yield results in the near future.

The possession of a nuclear submarine is central to the survivability of nuclear forces. Atomic weapons positioned on the nuclear submarine are hard to detect and therefore difficult to destroy, especially in

a first attack. It can also serve as a platform for launching a retaliatory "second strike." Detection of a nuclear submarine will be even harder in South Asian waters because of the temperature differential in the equatorial zone.

The project to building ballistic missiles, which can fire a "second strike" salvo from a nuclear submarine, is understood to be progressing, the Submarine Launched Ballistic Missile programme is approaching a key benchmark in its developmental cycle, according to sources.

The SLBM launcher is likely to be tested shortly. It has been submerged to a depth of around 10 metres after being fixed to pontoon in a facility under the supervision of the Eastern Naval Command. The naval headquarters, however, declined to comment on the project.

With the indigenous effort focussed on SLBM, India may fulfil its requirement of cruise missiles through imports. Though they essentially fly bombs, cruise missiles can be guided to long distance targets with pin-point accuracy.

The Navy is already in the process of acquiring two variants of Klub missiles from Russia which are being mounted on some Kilo-class submarines. Three Khrivak class frigates are also currently under construction. Klub missiles can achieve a range of around 300 km. Since one variant of this missile can mount a warhead of around 450 kg, it remains to be seen whether it can be exploited in a nuclear role.

As for strategic bombers, the Covernment negotiations with the Russians for the transfer of four TU-22M3 planes have reached an advanced stage.

THE LABOR

Support to NMD hasty: Scindia

SHIVPURI (M.P.), MAY 23. The deputy leader of the Opposition in the Lok Sabha, Mr. Madhavrao Scindia, today termed as "a hasty step" the support given by the Prime Minister, Mr. Atal Behari Vajpayee, to the United States President, Mr. George Bush's National Missile Defence (NMD) programme. "Mr. Vajpayee's statement welcoming the U.S. President's programme is not in keeping with the national interests," Mr. Scindia told PTI in an interview here.

Mr. Scindia, who is on a two-day tour of his Guna-Shivpuri parliamentary constituency, strongly criticised the foreign policy of the NDA Government and charged Mr. Vajpayee with using mere words to mislead the people.

"To offer an one-sided support to a programme whose basic outline is not even known, cannot be called anything but foolhardiness," Mr. Scindia said.

The Prime Minister should have created an atmosphere before making any statement on the NMD and taken into confidence not only the allies of the NDA but also the Opposition parties, he said.

"The Vajpayee Government is extending support to the NMD to appear good in the eyes of the U.S. and the Congress opposes this as a matter of principle," he added. Mr. Scindia also hit out strongly at the Prime Minister for the manner in which the latter was dealing with corruption.

He said "when Mr. Vajpayee assumed office he had proclaimed his intention to uproot the ghost of corruption from the country but when the Tehelka episode showed the then national BJP president accepting a bribe, Mr. Vajpayee said in Parliament that he would not be scared by the ghost of corruption".

"This indicates the vast difference that lies in what the Prime Minister preached and what he practised," he said.

Mr. Scindia alleged Mr. Vajpayee was busy in suppressing those issues which had now come before the people's court and added that although the NDA Government was neck-deep in corruption, the Prime Minister was trying to provide it with a moral garb.

Mr. Scindia claimed the Vajpayee Government had no action plan to deal with the Kashmir problem and charged it with being busy in telling the people that its decision to go in for a ceasefire in the troubled State was a big achievement. — PTI

THE INDU

2 4 MAY 2001

On NMD, it is perilous to be impetuous

What's in it for us? %

NDIA'S surprisingly prompt endorsement of the US. government's plans to create a National Missile Defence (NMD) Arrangement has generated both curiosity and criticism. Curiosity about the rationale of its endorsement of USA's plans within eight hours of their announcement. Criticism that India has given full support to US strategic plans to manage the global security environment about which even its allies have been cautious. There was also the criticism that India had contradicted its own statements criticising USA's intentions of doing away with the Anti-ballistic Missile (ABM) Treaty.

India's statement supporting Bush's NMD policy also raises the question of whether India now fully shares US perceptions on global security. On all counts the government's pro-NMD statement is a major policy announcement. Any value judgements on it should be based on answers to the following questions: Has India clearly understood the motivations of the US to deploy the NMD? Was India's supportive announcement an impromptu policy decision or was it preceded by consultations with the US and assessments of likely reactions to it from other powers? Did we assess the implications this has for India's nuclear weaponisation and missile capacities?

One doubts whether India has understood the motivations of USA's NMD plans clearly. The rationale given is that India has not commented on the NMD itself but has endorsed US policies because it aims at a reduction of nuclear missile arsenals - an objective which is in line with the Indian aim of eliminating weapons of mass destruction. Secondly, the NMD could provide security against potential nuclear threats from powers which may be inclined to use such weapons against India. This perception is valid, but the point is that the fundamental US objective is to emerge as the supreme power, transcending the current arms control and disarmament arrangements.

John Lodal, former principal deputy

under secretary of defence at the US National Security Council, has stated this clearly in his, *The Price of Dominance:* As Russia's nuclear arsenal continues to shrink with age, a significant NMD could give the United States for the first time in the nuclear age, a 'true first strike capability', the ability to launch a pre-emptive

attack destroying enough of Russia's weapons systems permits the NMD to intercept any residual retaliation. A nuclear first strike capability would provide the ultimate military advantage, giving the US enough force to threaten the survival of any rival." This thesis has been backed up by the US National Security Adviser



J.N. DIXIT

announcement on May 2 followed a telephone call from Rice to Singh. So our policy statement is based on consultations with US leaders. What could the deal be? It is reasonable to presume that India did not have any detailed discussions on its proposed reaction to the NMD with other powers. One learns

that our pronouncement is based on the assumption that, except for China, all the power centres will fall in line with US plans.

But one still needs to knowwhether our government had carefully assessed the implications of NMD on our evolving nutlear weapons and missile systems. Since we support ment was based on recommendations from Jaswant Singh as the foreign and defence minister and his advisers. The foreign office and service chiefs had only a marginal role in the exercise. Nor was the statement preceded by Opposition leaders being given a briefing. Wasn't this minimal consultation necessary before making a major policy statement on national security matters?

As for the question about whether there would be political returns, the recent visit of US deputy secretary of state, Richard Armitage, which is to be followed in June by that of USA's joint chiefs of staff India for consultations, signals a qualitative upgrading of Indo-US defence discussions. Inherent in this exercise is USA's acknowledgement of India's importance in the Asian region. There are also indications that sanctions may be lifted. The question is, which of them will be lifted and would this be in line with our substantive requirements?

As far as the impact of our support to the US on our relations with the Russia, West Europe, Japan, the Gulf and AS-EAN countries go, indications are that there would be no critical impact except for the perception that we are going to be progressively more supportive of US security policies. China would certainly interpret our stand as moving towards the US to pre-empt potential Chinese threats. The security dialogue with China, begun after Singh's visit to Beijing last year, would now be inhibited by this.

year, would now be inhibited by this.
Our pulling back from our previous stance on the ABM Treaty, will be seen as a qualitative change in our policies. Importantly, how would we reconcile our support of USA'S NMD with our desire to fashion substantive relations with Iran, which has been named as an adversary in US statements on NMD? The question is, was there any imperative not cessitating so quick a response? We there any political or strategic urgency be the first to come out in support of this US move? Our Parliament and people

have a right to know.

Are we sure, in terms of our security concerns, that the NMD will be deployed in India's favour in case of aggressive moves by China or Pakistan? We can't be certain

Condoleezza Rice's own stances.

It is in this context that the NMD is envisaged. The point to be made is that the elements of Bush's statement which we have supported cannot be de-linked from the basic politico-strategic motivations as expressed in US articulations given above. Have we come to the conclusion that these motivations are inevitable and we should adjust to them rather than work towards counter-balancing them with other like-minded powers? I do not think India's supportive announcement was an impromptu one. External Affairs Minister Jaswant Singh must have discussed issues related to National Missile Defence (NMD) with Strobe Talbott during the Clinton period, which he must have followed up during his discussions in Washington early in April with US defence secretary, Donald Rumsfeld, and Condoleezza Rice. It is to be noted that our

the logic of the NMD, have we taken the decision to keep our nuclear and missile carrying capacities at the present levels? Or have we taken the first step towards accepting a strategic security umbrella from the US in return for limiting our nuclear and missile capacities? There have been no indications that our reaction had taken into account the responses of China, Japan and the Russian Federation to the NMD and the deployment of theatre missile defence in the Western Pacific. Are we sure, in terms of our specific security concerns, that the NMD will be deployed in our favour in case of aggressive moves by China or Pakistan? One is not certain.

From all indications the Indian statement was not preceded by any Cabinet discussion or institutional discussions with the national security advisor or the Strategic Policy Group. The decision to support Bush's pronounce-

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P-II AFTERBLAST

 \mathbb{W} N-package still incomplete $\,$ $\,$

THREE years down the road from Pokharan-II and only those blinkered by jingoism would be convinced that India has capitalised upon having exercised the nuclear option. It would be valid to reflect upon whether the status of the nation has been genuinely enhanced since its attempt to gatecrash the nuclear club. For apart from a few odd brownie points that Uncle Sam has tossed about — upon which we choose to feast — there is nothing to suggest that India has become the major player in global affairs. It is no comfort that is not quite the pariah it was when the tainted Hindujas were required to facilitate a special envoy gaining access to 10 Downing Street. Many of the impediments to India not moving ahead are self-created. At the military level doubts persist over the development of efficient weaponry and delivery systems. The declaration of a former Scientific Advisor that "weaponisation is complete" and government statements that the Agni-II missile has attained operational status and is in the process of induction do not add up to a credible deterrence. If the air force has the capacity to drop the big bombs it has not projected it thus far, and there has been little forward movement in regard to the ability to launch n-tipped missiles from submarines.

Nor have government presented a clear picture of the command and control structure, which is critical to nuclear forces. The proposed Chief of Defence Staff will in all probability control the strategic forces (the decision to press the button must obviously remain political) but turf battles are evident about operations of strategic command. It is obvious that the "triad of delivery systems" mentioned in the draft nuclear doctrine is far from reality. The status of the draft doctrine is itself dubious. Nobody demands that government spell out how many weapons it has, their equivalent tonnage in terms of TNT or the range and accuracy of the delivery mechanism, but the vague statements that generate domestic drumbeating do not ensure that the nation acquires the degree of respect/fear worthy of a nuclear power. Nuclear credibility and deterrence is based upon transparency, in military terms it sends out a signal of both reach and punch, in political terms it manifests a sense of responsibility that is expected of those making pretensions to greatness. The secretness that cloaks conventional weapons capability is counter-productive in the nuclear context, it breeds suspicions, and worse. Three summers ago the government created an impression that it had failed to think the matter through before giving the scientists the green light. That impression holds true today in respect of the military, diplomatic and potential implications of being a nuclear power. Which calls for a lot more than the proverbial bomb in the basement.

THE STATESMAN

Much Ado over NMD

FDI Must be Basis of Indo-US Ties

By RAJA MENON

MOST countries rarely interact with each other on a single track. Big countries never do so. An American electronic surveillance plane still sits in Hainan, without a nose and a propeller, but China attracts \$45 billion FDI a year, mostly from the US. If this is a worsening relationship, India could happily also opt for a similar one with the US. Indian support for the NMD was a quick, decisive and inevitable step, although the manner in which it was taken, bypassed the recently instituted multi-disciplinary institutions that the country had painstakingly set up.

The manner of taking it brought back the worst memories of the eighties and early nineties when India's nuclear arsenal was treated as a diplomatic problem to test or not to test, and later on, to sign (CTBT) or not to sign. Major decisions may present the highest political authority with a straight multiple choice question. But behind that simple decision lies hard work, by many arms of the government, which it turned out had not been done when the country exploded its nuclear devices in May 1998. There was no strategy, no delivery system, no command and control and no arsenal. Sadly, our approach to the American NMD betrays a strikingly similar response to nuclearisation - all declaratory and no substance.

For over 18 months, the NMD, we know was coming. But to date there is no analysis in Delhi on what the NMD is. Neither the NSC. nor the NSAB has defined for the government what exactly is, for instance, capability III of the NMD and whether we can live with its downstream effects, or not. The problem has been dealt with purely at the diplomatic level, sadly and here the argument has been whether Russia will be miffed or China will be annoyed, if we say yes to the NMD. Nor do we have a serious view from the government on whether it believes that the US will be technologically successful by 2015 in installing capability III, and what the consequences will be for the militarisation of space.

It should have been obvious that China's nuclear arsenal modernisation would comfortably swamp the NMD at least in 2015. The fact that China has also not come up with its analysis of the exchange ratio in 2015, shows similarly poor analytical processes as New Delhi's. So we

got the decision right this time, but for the wrong reasons. It is not that the world is moving away from the cold war, but that the technology trajectory has overtaken diplomacy once again. NMD today is viable, it wasn't so in 1972 at the time of the ABM treaty. There is no record in history of a nation, or a people foregoing a technical advancement out of altruistic reasons, and least of all in the field of military technology.

The Armitage visit was most refreshing because the Indian approval of the NMD opens up new possibilities. Just that. It hasn't got us anything yet, because Armitage's blunt question 'what do you want'? could not be answered coherently by any Indian, at least in public fora. Too may Indians, at least in Delhi, seek vague and meaningless benefits like a strategic alliance or a strategic partnership. In the real world, there are no

IN BRIEF -

- New Delhi has undertaken no analysis of what the NMD is
- There are more negatives than positives in Indo-US ties as they are today
- More FDI would mean a more secure security relationship

such things. When Americans who deal with India in the state department and the Pentagon are asked bluntly, what the substance to the bilateral relationship is, shorn of platitudes, they point out to just two issues — Indians in America and common interests in the Indian ocean. These are the beneficial ones. The negative list is unfortunately much larger and it includes post-Pokhran sanctions, dual use technology denial regimes (pre-Pokhran), absence of military sales, collapse of the Indo-US joint technical group and the naval working group and the spectacular failure by India to attract US FDI.

The sequel to Armitage's visit could correct all the misunderstandings except the most serious one of obstructing American investment. This is not in the hands of the US government, but certainly in the hands of the Indian government, as it moves haltingly or not at all with reforming the justice system, taming the bureaucracy.

improving infrastructure, disinvesting and reducing public debt. Armitage is the most important and most senior official who has again reiterated that if the Indian government did all the above, FDI would gallop along and create a huge constituency in the US, that would then work through Congress to force the US government to look benignly at India.

The national security relationship between the two democracies will be overwhelmingly influenced by money flows. Diplomats can do little, other than to make each other miserable, with India's anti-US voting record in the UN and the US' calculated put down of Indian ambassadors. To get back to the downstream effects of the NMD; it was once thought that the immediate fallout would be to force the Russians and the Chinese to increase their arsenals, thereby setting in motion similar re-arming in Europe, India and Pakistan. This was the position even nine months ago. Bush's offer to go below START unilaterally, and Russia's financial woes have knocked the bottom out of that argument.

The fixing of capability III at neutralising only 20 warheads and 100 complex decoys, should have assuaged China's insecurity on NMD too. Where China or anyone else's insecurity will be fuelled is by TMD which is already in place on board the AEGIS class destroyers. With the freedom of the seas that the US navy enjoys, these destroyers will make the US counter-proliferation strategy watertight anywhere. Taiwanese defence is, therefore, already foolproof without the US being physically present on Taiwan's soil.

Equally, NMD will force other nations to look more closely at anti-satellite warfare (ASAT), and unless some international regime is quickly brought into force other than the existing toothless one, near space could become anarchic. These issues should have been addressed in the Indian paper that was not written. Until it is, it would be advisable to combine the defence and external ministerial portfolios for integrated work, because the US will increasingly rely on the assistant secretary of state for politico-military affairs and the deputy assistant secretary of state for strategic affairs, to talk to whom we have no comparable office.

THE TIMES OF INDU

OKHRAN II: THREE YEARS LATER

India has been a good boy, preparing for the exams? but when will it start

hit de anniversary of the third anniversary of the pokhran II nuclear tests of 1998 that dramatically heralded the emergence of India as an SNW, a state with nuclear weapons. This assertion challenged the existing global nuclear order enshrined and legitimised by the Nuclear Non Proliferation Treaty (NPT) that divided the world into five NWS — or Nuclear Weapon States and the remaining non-NWS.

(India and later Pakistan, both non-signatories to the NPT added a new category to the nuclear lexicon and there was little doubt that the nuclear pot was being churned. The substantive implication of the May 1998 nuclear tests was that India had moved from opaque or non-weaponised deterrence to one of overting an option that till May 11 had been kept "open". However, the nuclear tests of May 1998 were overtaken by events as disparate as the Lahore bus trip of Prime Minister Vajpayee and the subsequent berrayal in the craggy heights of Kargil. Three years down the road, India's nuclear trajectory merits scrutiny and the resultant inferences are anomalous. Deterrence is a two-way game and as far as the external factor is concerned, there is little or no substantive change in the operational aspect of India's deterrent profile before and after May 1998.

India carried out the 1998 nuclear tests, to protect core security interests and ensure a degree of strategic autonomy in the post Cold war world and there was a degree of inevitability about this development. However, acquiring a nuclear weapon capability and the practice of deterrence is a complex task and to a condictor of the condition of the total of the condition of the condition

elite of a siderable extent influenced by the gic culture that characterises the nation. India, with its distinctive minimum credible deterrent and taneously reiterate and pursue

taneously reiterate and pursue the commitment to global nuclear disarmament.
India also sought to assuage global opinion by adopting a no-first-use policy as the bedrock of its nuclear doctrine and having carried out the last set of tests on May 13, 1998, accepted a self-imposed moratorium on further nuclear testing. In effect, India was willing to conform to



FALLOUT: After the heat and dust of Pokhran II settled, it's time for Indo-US rapprochemen

the spirit of the CTBT even while remain-

ing outside the treaty.

And in good faith, India extended the olive branch to Pakistan through the Lahore bus that Mr Vajpayee boarded at great political risk. It is instructive that the majority of the accords contained in the February 1999 Lahore Declaration refer to confidence building measures on the nuclear and missile front.

However, the Lahore bus was punctured in Kargil in the summer of 1999 and, paradoxically, it is here that India's nuclear profile underwent a positive transmutation in contrast to the perception of the properties of the perception of t

ritory and Pakistan's attempt to indulge in nuclear brinkmanship led to negative returns at the global level. India had od it in good stead to date. Delhi by Mr Armitage, a nuclear game by the rules and this recti-tude has stood it in good stead to date. tion that was attached to Islamabad India exercised commendable restrain in dealing with the intrusions on its ter demonstrated its credentials to play the The visit to Bush special

Bush special envoy, is a case in point. In retrospect it appears that while India has made some positive progress on the

degree of stability with a nation that has 500 warheads — that is a ratio of 1:175. The challenge for India in the immedi politico-diplomatic front as far as its nascent nuclear capability is concerned, the operational aspect of deterrence remains as blurred as it was before May 1998 and this is an anomaly that must-be redressed at the earliest. The practice of deterrence has a genealogy that goes back to the early decades of the Cold War and it is averred that the tenets of this strategic statecraft are cast in stone.

swiftly to an appropriate level of operational credibility as far as the nuclear weapon was concerned. But there has been the equivalent of dithering ambivalence that is symptomatic of the diffident strategic culture of the Indian elite, which is uncomfortable with fracro millitary power, a trait that is manifest across the board. The nuclear doctrine remains of states and is predicated on appropriate fevels of credibility and transparency. In other words, during the Cold War while there existed an intense ideological divide between the two superpowers, they recognised and respected each others

Nuclear deterrence is a complex art that harmonises technology and strategy with the political and military capability

a draft that awaits governmental sanction and the realisation of the minimum credible deterrent is still clusive.
While there is emphasis on the fact that India's nuclear capability is under civilian control, this appears to be confined to the scientific and diplomatic spectrum alone.
As is well known, the Department of Atomic Energy and the Ministry of Exter-

ferences notwithstanding, both sides ensured that an acceptable degree of mutuality was arrived at as far as nuclear

weapons were concerned. Mutuality in deterrence parlance is not synonymous with symmetry and a case in point is how China in the post Cold War world with

recognised and respected each others WMD capabilities — more so after the Cuban missile crisis in 1962. Political dif-

is derived from its operational contour and this is an amalgam of the force level, the command and control and the doctrinal underpinning. Stability is ensured by the right mix of credibility and transparency so as to arrive at the requisite level of mutuality with the interlocutor in question in this case China and Pakistan.

rent, as opposed to the minimum credible deterrent. Whether India stabilises its deterrent on the aircraft or the Agni missile is a matter of operational detail but the central issue is that deterrence stability can only be predicated on credibilidefence structure has been mooted. The need to acquire the necessary degree of operational readiness as far as the deterrent is concerned cannot be over-emphasized and to that extent perhaps there is a case for rearranging the semantic and striving for a 'credible' minimum deter-The entire Indian security apparatus and infrastructure has received a detailed review post Kargil and a higher defence structure has been mooted. The and transparency leavened by politico

Strategic capabilities of states cannot Strategic capabilities of strategic culture divorced from the strategic culture that permeates the ruling elite and India is no exception. It is a nascent and reluctant nuclear weapon state that is marked This was termed a peaceful nuclear explosion and India refused to weaponise this capability. This reticence may be ascribed to the diffident strategic culture of the ruling elite who were ambivalent by many distinctive traits and qualities. India is still committed to total global disarmament and while this Holy Grail may be elusive it needs to calibrate its strategic capabilities more astutely. May is a month of multiple nuclear relevance and apart from 1998 when India declared itself an SNW, on May 18 1974 the first nuclear test was conducted in Pokhran about the nuclear weapon.

merely moved from non-weaponised to reticent and muddy deterrence? Is India, the nuclear unicorn trying to defy conventional wisdom yet again to cross the chasm in three leaps? This is not the question we should ask in May 2002. India defied conventional wisdom and unlike every other state before it demon-strated a nuclear capability but refrained from becoming a SNW. It paid a high price by remaining an outcaste in the Cold War rying to cross a chasm in two leaps. May 1998 was the second leap but India is yet to nuclear order and this stance was akin to

(Commodore Bhaskar is Deputy Director, IDSA, New Delhi. The views expressed are personal.)

THE HINDUSTAN THE

Kalam denies plan for another whichear test

BANGALORE, MAY 11. The Principal Scientific Adviser to the Government, Dr. A.P.J. Abdul Kalam, today denied reports that the armed forces were perfecting atomic warfare skills as part of the ongoing "Poorna Vijay" exercises.

Speaking to mediapersons after delivering a lecture at the Technology Day deliberations organised at the Indian Institute of Science here, Dr. Kalam said the armed forces were only conducting a training exercise in the Thar Desert. "Nobody is testing; it is only a training operation," he quipped.

Asked whether preparations were on for another nuclear test, a "Pokharan-III," he denied it. "Not at all. There is nothing like that. The Prime Minister has said all tests are over."

Stating that "low-intensity conflicts" had come to stay as a "way of life," he said the country was developing the requisite technology geared to meet the challenges posed by such conflicts. "Low-intensity warfare is a serious area. We need to live with that," he observed.

Earlier, in his lecture, he referred to the "India 2020 — Vision for the New Millennium," and said the action plan had focused on education, healthcare, agriculture, information and communication technology, and governance.

If India were to become a knowledge superpower, it should take up knowledge protection through Intellectual Property Rights. Terming governance as a critical area, he said technology could make it easier and people-friendly. As an illustration, he referred to the information on grain prices made available to the farmers by the Andhra Pradesh Government.

To a question on the "brain drain," Dr. Kalam said the presence of a large number of Indian software personnel in the Silicon Valley had actually established a connectivity between them and the Indian scientists. "They are not anti- nationals," he quipped. "They love their country."

Kalam: No tes of N-weapon

PRESS TRUST OF INDIA

BANGALORE, May 11. (Principal scientific adviser to the government of India, Mr APJ Abdul Kalam, today denied that India "is testing" nuclear weapons as part of the orgains. weapons as part of the ongoing Poorna Vijay,' the biggest ever exercise by the armed forces over the last one decade being

conducted in the Thar desert.)
("Nobody is testing. It's only a training operation," Mr Kalam told reporters here, denying re-

ports about the testing of nuclear weapons. Asked about the possibility of Pokhran III', Mr Kalam said: "Not at all. The Prime Minister has said we have finished all tasks.'

Earlier, delivering the talk, Nation's Journey of Two Deca-des (2000-2020) - Nation-Youth-Technology,' on the occasion of the third anniversary of the Pokhran II nuclear tests and later responding to questions by the audience, he said India was developing some technolo-

gy for low intensity warfare.
"Low intensity warfare is going to be one of the ways of life in future and we have to con-

tend with it," Mr Kalam said Welcoming the government's move on opening up of the defence production sector to private industry and permitting 26 per cent FDI, he said the measure would lead to competition, cost cut-down and quality improvement.

"Indian research and development institutions and public and private sector will get inte-grated and it's good," Mr Ka-lam observed.

"A loop of villages in Madhya Pradesh and Kancheepuram are being connected by a 'ring road' to make the rural areas attractive to investors, empower those villages and reverse the migration to urban places," he said.

"We are trying to sell it (the idea) to the planning commission. We want to start in 100 places in three to four years. It needs heavy investments. Public and private sector have to pool in resources," he said.

Mr Kalam, responding to a question from a member of the audience, refused to join the debate between the scientists and astrologers over the introducti-on of "vedic astrology" in universities.



Irrational Exuberance

No Brownie Points for Welcoming NMD

By MANOJ JOSHI

THE elements of the Bush administration's new nuclear doctrine, hailed so exuberantly by New Delhi, are simple enough: A move away from the offensive 'deterrence' doctrine that maintains that any attempt to attack the US would be met by a devastating counterattack. A shift towards a defensive ballistic missile-based system that would enable the US to block attacks, and in the process make it more discriminate in using its retaliatory capacity.

Separated by two oceans and without a missile power to its north and south, one can see the logic of those in the US who think that a ballistic missile defence scheme would add to their national security. Whether or not this will promote stability in a world is quite another thing. There is the question of whether the technology will work. Related to this is the issue as to whether it will destabilise the prevailing deterrence-based security framework.

States that are deterred by the US nuclear capability may feel that the new shield could devalue their capacity to scare the US. During crisis periods, they could be encouraged to launch a preemptive attack. There is also another script that must be considered. Given America's past record, would not its enormous dominance of both defensive and offensive technologies encourage irresponsible behaviour?

These and a host of other issues compel attention, but here in India, which has hailed the move, the first question that needs to be asked is: What's in it for us? Certainly, there would be little benefit from the NMD as a shield. India's potential and real adversaries are on its borders. The missile delivery time is one-fifth of what would obtain in the US scenario and there are many other ways of delivering nuclear warheads. For this reason, apologists of the government have dressed up the Indian shift in the garb of geopolitics. The step, it is argued, is part of a grand architecture of the post-cold war world, where India will reap great benefits by aligning itself with the world's hyperpower — the US. To those who may think this is too far-fetched, there are also whispered suggestions that the US may lift all the sanctions imposed on India since Pokhran I, and, possibly realign its Kashmir policy towards recognising the LoC as the international border.

There is a somewhat more implausible argument being retailed by otherwise hard-headed analysts. This is that India is not going along with this for any gain, but from the belief that US aims, as expounded by Mr Bush, were identical to New Delhi's theology featuring an opposition to MAD and the 'discriminatory' world nuclear order. That this was sought to be done by a selective reading of the Bush speech is quite another thing.

quite another thing.

Actually there is little the US can offer to India that ought to make it throw caution to the winds and take positions that are likely to undermine its national security and erode its autonomy. India's size, location and demography give it a geopolitical character distinct from that of any other country in the world. This is the reason why India gravitated towards a

- IN BRIEF -

- The NMD as a shield holds no benefits for India
- The US can offer India little for the latter's endorsement of the NMD
- China's opposition to the NMD could adversely affect India
- There is no alternative to engaging the US economically

feisty non-alignment in the aftermath of Partition. This is also the justification provided by the Vajpayee government for crossing the nuclear threshold. Jaswant Singh toured world capitals justifying the Indian nuclear tests on the ground that India had to safeguard its strategic autonomy. In now proposing that India align itself closer to the US, the BJP-led coalition is not serving India's national interest.

When the US anti-proliferation pressure was at its peak in the early 1990, it was suggested that India would get unspecified goodies from the US in exchange for participating in the five-nation conference mooted by the US. Since the US government provides little bilateral aid to India and does not block direct or institutional investment, the only leverage it has is with dual-use technologies that it has prohibited. Many of these are available from Europe or Russia.

A quick audit of the US technology denial regime would suggest

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that it has at best been an irritant, but not a major obstacle for India.

US recognition of the LoC as the international border would be a major gain for India, but it will hardly settle the Kashmir problem. Indeed, the chances are that it would exacerbate the situation, at least in the short-to-medium term. Such an outcome is better obtained through patient negotiation rather than a diplomatic coup.

Perhaps the most dangerous subtext of New Delhi's thinking has been in relation to China. Officially, New Delhi claims that it does not view China as an adversary. But prime minister Vajpayee's letters to world leaders in the wake of the nuclear tests offered the potential Chinese threat as a substantial justification. The Chinese opposition to the NMD and the consequences of this are bound to singe India. Did the government consider this at all?

Good relations with the US ought to be an important, though not necessarily, central element of Indian policy. Indeed, the lack of any major conflict of interest and the current state of relations make this a reasonably easy goal. Whether or not the NMD succeeds is something that, will be decided by the American people. The government's illconsidered support for the US will not buy the ticket needed to sup at the high table of world powers. The genuine ticket will come, as it came to China, because of its economic engagement with the US and its national interest-oriented policy.

India, too, would be wise to engage the US in the economic, rather than the more hazardous military-political, field. But the essential condition for this is an infrastructure upon which Indian agriculture and industry can flourish and a legal and administrative foundation that promotes Indian commerce. This is no longer an academic issue, and nor does it brook any more waste of time. Poor human and physical infrastructure has created near-crisis situations in several important sectors of Indian industry and agriculture. The opening of world trade requires urgent steps other than tariff barriers to promote Indian competitiveness. challenge now is not what the US can do for India, but what the Vaipayee government can

India should bargain for support to NWID

By K SUBRAHMANYAM \\\

NEW DELHI: US Deputy Secretary of State Richard Armitage will be visiting Delhi on May 10 and 11 to solicit Indian support for the new policy unveiled in President Bush's address to the National Defence University.

This is the first time that Washington is initiating

National Defence University.

This is the first time that Washington is initiating a dialogue with New Delhi on such a global strategic issue. A careful reading of Bush's speech would indicate that it went far beyond amouncing the US determination to initiate a missile defence programme. Contrary to popular impressions, it did not attempt to revive the Cold War; in fact it ended the Cold War which began with Winston

NEWS ANALYSIS .

Churchill's Fulton speech. Mr Bush's emphasis was on the end of Cold War; Russia was no longer the adversary. Mutually assured destruction (MAD) should no longer be the primary security paradigm. New threats are perceived to be emerging, and new strategies are called for to deal with them. This was the basic thesis of the speech.

The US is confident of bringing the Europeans and Russians round to accept the missile defence concept. President Bush has offered unilateral cuts in nuclear arsenals since he no longer fears Russia as an adversary. He does not consider the Anti-Ballistic Missile treaty, which was based on the MAD paradigm, as relevant to the post-Cold War era. The Bush administration is that also formulating a new defence policy based



South Korean protestors jeer at US missile defence policy.

on its technological capabilities, and not merely on the basis of threats perceived. This is a proclamation of the end of the Cold

Nat. US missue defence poucy.

War era and the beginning of a new era of unchallenged US global supremacy as the sole superpower, beset with perceived indirect threats of ter-

rorism and proliferation by both state and nonstate actors. One may or may not agree with the US threat assessment. The proposed missile defence system may or may not work technologically. But it would be wrong to ascribe to the US strategies which it does not contemplate; with a hundred with China, Washington is unlikely to engage in a Cold War face-off with Beijing as it did with Moscow.

Unfortunately, even as the US is changing its strategy radically and launching on a new security paradigm—doubtlessly to sustain its dominance—the Cold War conditioning elsewhere in the world, particularly in India, runs the risk of failing to understand this and craft its optimal response. It is because there is a post-Cold War security paradigm of a new balance of power, under overall US dominance, that the US deputy secretary of state is coming to Delhi.

The Cold War became inevitable in a nuclear age with two major military powers — the US and the USSR — wielding virtually equal deterrence capabilities. The present power equation between the US and China is likely to widen further, with or without missile defence. In this context, it would be counter-productive for India to formulate its responses from an obsolete Cold War perspective. There should be new thinking to deal with the challenges of the changed US security paradigm.

challenges of the changed US security paradigm.

Armitage's visit is the first test. Delhi should follow up its endorsement of Bush's speech by additing appropriate US responses to Indian Concerns on measures like sanctions, which were a product of cold war thinking.

THE TIMES OF INDIA

India to hear out Armitage on NMD

By C. Raja Mohan

NEW DELHI, MAY 10. India will be in a listening mode tomorrow when the visiting U.S. special envoy, Mr. Richard Armitage, briefs the top echelons of the Government on the latest U.S. proposals to build a system of national missile defences (NMD).

Alone among the major nations of the world to welcome the U.S. President, Mr. George W. Bush's unconventional ideas on revising the nuclear doctrine, India would want to be filled in by Mr. Armitage on the details of the American plans for NMD.

The quick and unambiguous support extended by India to certain elements of Mr. Bush's proposals has generated a bit of political heat here. But it also fuelled speculation that Indo-U.S. relations might be on the verge of a great leap forward.

Mr. Armitage, who is arriving here late tonight, will hold substantive consultations with the External Affairs Minister, Mr. Jaswant Singh. He will also meet the Principal Secretary to the Prime Minister, Mr. Brajesh Mishra, and Mr. Arun Singh, special adviser in the Ministries of External Affairs and Defence.

Mr. Armitage, U.S. Deputy Secretary of State, will call on the Prime Minister, Mr. Atal Behari Vajpayee, and the Leader of the Opposition in the Lok Sabha, Ms. Sonia Gandhi, in the evening. The visit to India by Mr. Armitage is part of a charm offensive by the U.S. to explain Mr. Bush's latest proposals on NMD to key European and Asian nations.

As the senior-most official of the new U.S. administration to visit India, Mr. Armitage is also expected to review the full range of issues in the bilateral relationship.

The Deputy Secretary of State, who is arriving after his consultations in Japan and South Korea, is expected to get a far more

enthusiastic reception here than in either Tokyo or Seoul, Washington's long standing allies in the region.

India will be keen on getting an intensive presentation from Mr. Armitage on the ideas it has liked in Mr. Bush's proposals. These relate to deep cuts in nuclear arsenals, the depth of U.S. commitment to a consultative approach on NMD, and American thinking on the cooperative development of defensive technologies.

Besides briefing key Asian nations on NMD, Mr. Armitage wants to take back ideas from the region as inputs into the U.S. strategy to develop missile defences.

The NMD consultations between India and the U.S. are taking place, ironically, on the third anniversary of the nuclear tests in May 1998 which riled the Clinton administration into slapping sanctions against Delhi.

The Bush administration's decision to reject old nuclear mantras, and the signs of a convergence on NMD raises the prospect that Indo-U.S. relations will no longer be hostage to past differences on non-proliferation.

Govt must retract stand: CPI(M)

PTI reports:

The CPI(M) today asked the Government to retract from its stand welcoming Washington's proposals on NMD and convey to the U.S. New Delhi's concerns at the "new version of Star Wars", saying it could lead to a new arms race with grave repercussions for India.

Asking the Government to "retract from its hasty stand," the CPI(M) said the missile defence plan was "an American quest for unbridled dominance in nuclear and missile weaponry which will upset all existing arms control measures."

See also Page 13

THE HINDU

India's stand on disarmament compromised: CPI(M)

By Our Special Correspondent

NEW DELHI, MAY 10 (The Communist Party of India (Marxist) today demanded that the Vajpayee Government retract from its "hasty stand" over the United States' National Missile Defence (NMD) plan and asked it to convey India's concern over this new version of Star Wars.

The CPI(M) Politburo said New Delhi's concern should be communicated to the U.S. Deputy Secretary of State, Mr. Richard Armitage, who is here for talks.

The plan envisages the nullification of the 1972 Anti- Ballistic Missile treaty and creation of a new missile weapon system. "This is an American quest for unbridled dominance in nuclear and missile weaponry which will upset all existing arms control measures. It will result in a new nuclear arms race which will have serious repercussions for India and South Asia too," the CPI(M) said in a statement.

It said that by hastily welcoming the Bush plan without any "careful consideration or consultation," the Vajpayee Govern-

ment had "compromised" India's basic position on nuclear disarmament and "shocked" public opinion.

The party congratulated the 7,000 BALCO workers and said despite facing hardships and "divisive machinations" of Sterlite Industries, the workers remained firm for a long time without succumbing to the "pressure of the BJP-led Government."

Though the strike has been called off without thwarting the privatisation by the BJP Government, the working class movement must carry forward the struggle against the privatisation measures which were in the offing, it said.

'Serious consequences'

'Expressing apprehensions over the Government's decision to "open up" defence production, the CPI(M) said the move was fraught with serious consequences and should be taken up for a thorough discussion in Parliament. The participation of foreign capital in this sector would compromise national security and render defence preparedness vulnerable, it said.

On opening up sectors such as pharmaceuticals and airports, the CPI(M) said: "Such indiscriminate opening up to foreign capital has not yielded any beneficial results as seen in the glaring case of the Dabhol project of Enron."

The CPI said opening up pharmaceuticals would further ruin the domestic industry already facing a disaster following the lifting of Quantitative Restrictions.

The CPI said that raising the FDI limit to 49 per cent in banks would pave way for handing over the entire banking sector to foreign capital and that it was far more serious than the privatisation of the nationalised bank that the Government has been threatening.

The CPI(ML) said the Vajpayee Government had blurred the distinction between strategic and non-strategic sectors and was "squandering away" vital national assets to foreign multipationals. "The Government is damaging the national security," it said

THE HINDU

1 1 MAY 201

India manufactuiring N-arms: Govt

Hyderabad, May 10

turing the minimum number of nuclear weapons as announced INDIA HAS officially stated that it is going ahead with research and development and manufacin the National Security Policy.

The annual report (2000-2001) of the Department of Atomic Energy does not, however, menat the Bhabha Atomic Research Centre (BARC) in Mumbai, one tion what this minimum number is. It said the work is carried out

The report, in a cryptic statement, said "BARC continued implementation of necessary research and development as well as manufacturing activities to meet policy of credible minimum nuclear deterrence" of the units under DAE. the national

ing at per schedule" at the Centre for Advanced Technology (CAT) explosions in the laboratory. India's four-beam laser facility on a terra-watt laser is "progressin Indore, another laboratory under the DAE. One terra-watt equals 1,000 billion watts and such high-power lasers are used for simulating thermonuclear

New Delhi, May 10

laser" system code-named Delfin nously, puts it in a good position right behind Russia's "superin Indore, built totally indige-

will be ready for testing but says a machine that shoots out beams The DAE report does not mention when the terra-watt laser that BARC has also been working on the upgradation of Kali-5000, and before Israel's Aladin.

ouro said in a statement

The particle beam weapons, first developed by the USA in the

tunity of conveying its concerns to the US Deputy Stating that New Delhi should take the oppor-Secretary of State Richard Armitage when he VIS-

THE CPI(M) today asked the Government to

Centre should slam US N-policy: CPM

"The Vajpayee Government has hastily wel-comed the Bush plan without any careful considits the country later, the party said. retract from its stand welcoming Washington's New Missile Defence and convey New Delhi's con-cerns to the USA at the "new version of Star Wars", saying it could lead to a new arms race

"an American quest for unbridled dominance in Asking the Government to "retract from its hasty stand", it said the missile defence plan was nuclear and missile weaponry which will upset all existing arms control measures." eration or consultation'

> The New Missile Defence plan announced by the Bush administration "will result in a new nuclear arms race which will have serious repercussions for India and South Asia," CPI(M) Polit-

with grave repercussions for India.

would be handy for inspecting vertical surfaces in hazardous ground-based Prithvi and Agni

missiles. According to the report, BARC scientists have also devel-oped a wall-climbing robot that 1980s, can potentially knock out enemy missiles and according to DAE sources, could provide effective anti-missile protection for

environments

THE HINDUSTAN THE 1 1 MAY 2001

Nuclear innovations

India should try and ensure that the global missile defence system is not distorted by national interests, says Narendar Pani

HEN seen in isolation the enthusiastic Indian response to President Bush's missile defence plan is difficult to justify. There are too many questions about this defence that are as yet unanswered. There are doubts about the technology itself. President Bush's intentions too are not entirely clear. These doubts have led some of the closest allies of the United States to respond cautiously to the plan. And India, with its record of keeping some distance from the US on military matters, could have been expected, at best, to be very cautious in its support.

Against this backdrop the enthusiasm of the Indian response has, predictably, been interpreted as a

desire to curry favour with the US at any cost. But it may not be entirely appropriate to treat the issue of nuclear missile defence as just another initiative of a American President. It is an issue that affects the entire world. It cannot then be evaluated in terms of Indo-US relations alone. India needs to take an independent view of whether the world needs a nuclear missile defence. And, if it does, India must try to help

define the nature of that defence. If the government's response is, in fact. a part of such a larger vision, it is more promising than it has been given credit for.

It is becoming increasingly evident that the existing nuclear orthodoxies are under pressure. The threat of Mutually Assured Destruction may have, with the help of good fortune, prevented nuclear holocausts after the Second World War. But this deterrence works best in a bipolar world. With each side convinced that a small spark can lead to complete destruction, they need to not only be cautious themselves, but also keep their smaller partners in check. But with the end of the bipolar world, the need to keep the smaller partners in check is recognised only on one side of the earlier divide. Russia may have gained control of the Soviet nuclear arsenal, but it can do little to make its other Cold War allies fall in line. It is thus hardly surprising to find North Korea flexing its, still developing, nuclear muscle.

Theoretically speaking, the small countries should be even more warv

of the nuclear power of the US than the former superpower. But in reality, the smaller a country the greater the chance of it coming under, what the existing nuclear powers consider, a rogue leadership. And even if this leadership does not have the ability or even the desire to create a nuclear arsenal, it could allow terrorist organisations based on its soil to acquire these weapons. The combination of potential rogue states together with the spread of hi-tech, well financed terrorism makes it imperative to build a defence against nuclear missiles. As has happened since the days of the sword and the shield, every new development in offence creates a need for a superior defence.

This global requirement for a defence against nuclear missiles is unfortunately, but inevitably, distorted by the practice of nuclear decisions being in the realm of national policy making. If the major powers try to build the defence systems on their own, those who are left out will try to build the weapons that can penetrate these defences. This would throw the world into a new arms race, as each new defence generates a demand for new weapons, which generates a demand for new defences and so on. India is, arguably, under greater risk from this new arms race than the earlier one. It now appears likely that China will be a major player when, and if, a new arms race takes place. And it requires no great insight to recognise that a significant portion of its nuclear arsenal will be targeted at India. If India responds by building defensive systems, it would be drawn into an arms race where it will be, economically, the weakest among all the contenders.

One of the options India may then consider would be to find a place in the nuclear missile defence system being put in place by the US. India

could, for instance, offer a base for some parts of the defence\system. But such a loss of sovereignty will be difficult to sell politically. And, more important, it would not reduce the country's risks as it would then become a target for all enemies of the United States

India's best option then would be to ensure that the global missile defence system is not distorted by national interests. It could work towards creating a global nuclear missile defence, system that involves all the maior nuclear powers, if not all couperies. Once most countries are within the system, there would only be a few rogue states and terrorist groups seeking to develop weapons to penetrate this defence. And it is extreme-

> ly unlikely that these rogue individuals and countries can raise the resources to develop the weapons to penetrate a missile defence system that pools the scientific and economic resources of the rest of the world.

> This approach may appear Utopian, particularly when seen from a Cold War mind-set. But there is enough evidence from the last two decades to suggest that the major powers now realise the futility of a

nuclear arms race. The realisation that no one can win a nuclear war is unlikely to be challenged by a nuclear missile defence system. No matter how good the system is, there will always be a doubt that a nuclear warhead or two can slip through. And the US knows that if it diverts too great a portion of its resources to a new nuclear arms race, there are other countries waiting to take over the economic leadership of the world. President Bush's desire to involve other countries in his nuclear missile defence plans must not then be dismissed offhand.

Faced with this realistic possibility of the emergence of a globally developed, and controlled, nuclear missile defence system, India has done well to lend its support to the cause. But India must now make it clear that its enthusiastic support was not so much for the United States per se, as for progress towards a genuinely global missile defence system. And this can only be done if it comes up with a comprehensive new nuclear policy, rather than merely reacting to the actions of one major power or the other.

The Economic Times

NEW DELHI, MAY 9. It is one of those occasions, mercifully rare, when George W. Bush's proposal for the National Missile Defence pated by the political bosses of sure within the country. The (NMD) is currently the subject of a controversy, the sharpness of which could not have been antiche foreign office. It will add an ment and the Opposition that has building up on domestic isforeign policy comes under presprompt, euphoric official reexternal" dimension to the conrontation between the Governsponse of the Government of India to the U.S. President, Mr.

sponse and its speed. Not all in Mr. Jaswant Singh, personally and primarily responsible for the the top echelons of the Govern-Atal Behari Vajpayee, strongly defends both the content of the redecision, with far- reaching im-The External Affairs Minister, plications, after getting the approval of the Prime Minister, Mr ment agree with him.

mittee on Security. Mr. Brajesh The issue, as has been known Mishra, Principal Secretary to the curity Advisor, was not informed of it either. That being the case Prime Minister and National Sewithin the governmental set-up, from the very start, was not discussed by the Cabinet or its Comconsultations with the Opposiion could not have been contemplated.

The sincerity of Mr. Jaswant Singh is not to be questioned —

Treaty. country. Those who say he was carried away by the phone call from the U.S. National Security Adviser, Ms. Condoleeza Rice, do not do justice to him. Mr. Singh sees it as a historic opportunity for reversing the unsavoury past of Indo-U.S. relations that needs to be seized. This, according to the argument offered on his beout decision, the Government having been keen to making half, was no sudden, unthoughtsome such gesture at any appro-

However, it is in order to pick a Press release, carefully drafted by the high-ups. In that context, cape close scrutiny -- and un-Mr. Jaswant Singh could not esholes in the Indian response and the way it was projected through sparing judgment of his action.

priate opportunity.

being a fact of political life, the Congress(I), has a point when it complains that they were not consulted. This, however, is a ing no tradition, no institutional sulting the Opposition was not no The main Opposition party, the long-standing problem, there bemechanism or even an informal arrangement either for consultations at a short notice or for building consensus through detailed discussions. This vacuum Government's action in not consurprising - though by means desirable.

sensus on foreign policy became conspicuous, the first being the This was the second major occasion when the collapsed con-

NMD: euphoric Govt., aggrieved Opposition

aftermath of India's nuclear tests and related issues, like the stand on the Comprehensive Test Ban

Congress(I) leaders, they came to post-test defence posture, on the The Opposition felt aggrieved - that it was not briefed on the plan for a credible minimum deon several counts - that it was not told about the nuclear tests before the announcement to the Press, that it was not taken into figured in New Delhi's dialogue with the U.S. — according to the know of the details of these discussion from the American side confidence on the issues that had terrent and the like.

steps for a consensus on the CTBT, but in practice, no such fied because they were simply informed of the decisions already instead of being involved in prior The Government told the Americans that it would initiate moves were initiated. Only after the Opposition complaints became shrill, all-party discussions were held. The Congress(I) and others, however, were not satistaken and the positions adopted consultations.

past — for instance, during the tenure of Mr. P. V. Narasìmha Rao, when Mr. Vajpayee, then Opposition leader, was named to head the Indian delegation at the Human ture from the approach in the Rights Commíssion, or later when the I. K. Gujral government took Mr. Vajpayee and others into confidence before the stand This, no doubt, was a depar-Geneva-based U.N.

against signing the CTBT was given final shape.

ing against getting sucked in to the U.S.-China clash. apart from giving a timely warncould help impart a balance to tion taken by the Opposition In the present case, the posi-India's position on the NMD

China factor

any other country, speculation persisted that the U.S. intended to The China factor had figured in Mr. Jaswant Singh's talks with his American counterpart, Gen. Colin Powell, in Washington. Even though Gen. Powell emphasised that the U.S. effort to enhance reto Washington's dealings with lationship with India was important on its own and not a reaction convey a message to Beijing.

mitting its support to the missile shield and without using such phrases as "technological inevitanave exposed itself to criticism of the type, now directed against it, had it confined itself to welcoming the "cuts in nuclear weapons" The Government would not and the plan for "real consultations" with others, without com-

affect adversely the new begin-Opposition in the debate on NMD ing implications of the plan. At the same time, there is a case for guarding against steps that could could help rectify the euphoric one-sidedness of the Government The public intervention of the and draw attention to the disturbning with the Ú.S.

SON OF STAR WARS INDIA REACTED EMOTIONALLY TO US PRESIDENT BUSH'S MISSILE DEFENCE PROGRAMME

minister, Jaswant Singh, doing a China on the world? Recall the early days of the Deng Xiaoping era and the cooing between Beijing and Washington against the rhetoric of a strategic alliance of the two countries.

China was playing realpolitik, also with an eye on its rivalry with Moscow, and received ample rewards, which have been translated today into a trade relationship of \$100 billion, with a Chinese surplus of \$40 billion a year; significant technology transfers and direct American foreign investment of \$25 billion last year. Despite the present strains in the Sino-American relationship, Deng had a clear and coherent plan on how to chart his country on the path of fast economic, industrial and technological growth and modernisation of its armed forces.

Is India then following its own Machiavelli, Chanakva, to stand its nuclear policy on its head and side with the US to score Brownie points with the new Bush administration? Is it part of an overarching scheme of things to put India in the fast lane in terms of its economic and military development? The jury is still out, but the speed and effusiveness with which the external affairs ministry greeted President Defence plan is bound to be Bush's son of Star Wars plan, after the euphoria induced by Mr Jaswant Singh's meeting with George W. in the White House, would suggest an emotional reaction.

developments in India's pursuit of its foreign policy. One was the border crisis with China and the al Security Adviser, Condoleeza

f you want to estimate the

Bush missile shield's

s the Vajpayee government and its peripatetic foreign lal Nehru's great theme of build ing a brave new world on Sino-Indian entente. A second was the Indo-Soviet Friendship Treaty of 1971 to wage the Bangladesh war, a masterly exercise in realpolitik by Indira Gandhi to pursue her geopolitical objectives - gains that were later to be frittered away at Shimla. A third, more recent, development was India's decision to conduct a second series of nuclear tests in 1998, this time to claim nuclear weapon status for the country.

The last is particularly significant because it was a decision taken by the present coalition government. Indira Gandhi, it would seem erroneously, felt she could not take the first nuclear test in the Seventies to its logical conclusion because of the overwhelming opposition India met. The Vajpayee government was wise to complete her task because retaining the option of assuming nuclear status was becoming increasingly unattainable as the nuclear haves were closing all options.

ll the rhetoric and strategic jargon employed in the official Indian welcome for Mr Bush's pet project do not explain the motivation. It can be argued that since the National Missile accepted around the world, however reluctantly, and W. is determined to scrap the Anti-Ballistic Missile Treaty in the process, there is advantage in lining up with the US at an early stage. There have been a few seminal Had the cost-benefit ratio been calculated before the fateful telephone call made by W.'s Nation-



ALKING URKEY

S. NIHAL SINGH

Rice, or was Mr Jaswant Singh swept off his feet? There is a nagging suspicion that the latter might have been the case. Unless the Indian foreign minister's euphoria is simulated, the game of realpolitik can only be played with a cool head, with emotions kept in strict check.

The most salient aspect of W.'s unveiling of his Star Wars ideas was that it was very scarce on specifics and details and served the purpose of setting out US determination to go ahead in building a space warfare mecha-

Had the cost-benefit ratio been calculated before the fateful telephone call made by W.'s national security adviser, Condoleeza Rice, or was Mr Jaswant Singh swept off his feet? There is a

nagging suspicion that the latter might have been the case. Unless the Indian foreign minister's euphoria is simulat-

ed, the game of realpolitik can only be played with a cool head, with emotions kept in strict check

nism to protect American inter- the altar of Indo-US bonhomie. ests in the first — if not the last - instance. Second, this can be accomplished only by scrapping the ABM treaty. These two themes are wrapped round the rhetoric of consulations, America's plan to reduce its stockpile of nuclear weapons unilaterally without specifying when and how many and seeking friends and allies to help achieve essentially American objectives.

Although India seems to have given its blessing to the American version of bringing peace to the post-Cold War world, the technologies proposed are, in many instances, untested and the new American theme song is that if there are many layers of defensive and offensive weapons, the greater is the chance of shooting down enemy missiles. There is little doubt that the development of existing and proposed space weapons will be accelerated, and whatever allies and friends - India seems to have been placed in the latter category — might say about the American approach, W. would press on regardless.

he son of Star Wars has serious implications for the world, in particular Russia and China. After expressing its opposition, Moscow sought to enter a dialogue with the West by putting forth its own variant, which has been scarcely noticed by Washington. In any event, President Vladimir Putin had little choice but to accept W.'s offer of consulations because Russia has other priorities than to enter a new arms race. There can perhaps be a measure of flexibility on the ABM treaty, now also abandoned by India at rational policy.

The implications of the new Star Wars are even more serious for China because it would have little choice but to accelerate the development of its nuclear arsenals and would have to wrestle with breaching the Comprehensive Test Ban Treaty, apart from devoting vast amounts of money and resources to space weapons. While such a scenario would set back Chinese ambitions to join the ranks of the economically advanced countries, it would have a direct bearing on India's minimal nuclear deterrence. Economically, India would be even more hard pressed to join a space arms race.

With Jaswant Singh playing host to the Russian foreign minister, Igor Ivanov, shortly after his own surprising missile diplomacy, India sought to put the best face on its volte-face on nuclear issues. And Prime Minister Atal Behari Vajpayee himself is planning a visit to Moscow later this year. How the Vajpayee government can carry out its audacious venture in building close relations with the US to enhance its interests in the new world remains to be seen.

Few will disagree with the proposal that with the old ideological world divisions gone, India must build on the flowering of relations with the US towards the end of the Clinton presidency. After the initial Indo-US estrangement at the beginning of the Cold War, this is the first real opportunity to explore a rewarding relationship with the world's most powerful nation. But it can do India little good if the heart rules the head and emotional outbursts of love take precedence over matters of

running, people were being trained to operate non-existent equipment.

"This was fast-tracked, and as a result some of the things that might have been done, that would have been done, did not take place," said Lt. Gen. Russell Davis.

And over at the Senate Armed Services Committee they were having hearings on the Osprey, the Marines' revolutionary new aircraft that keeps exhibiting a deeply undesirable tendency to fall out of the sky. A Pentagon expert reported that the Osprey was "frightfully immature," and had been rushed into service too

Meanwhile, President Bush was making his long-awaited defence speech, vowing to turn the missile shield into a rush order. The administration, which does not want to race to judgment on reducing the level of arsenic in the drinking water, is perfectly cool about blowing \$100 billion on a system that nobody has figured out how to. build.

Mr Bush's leap of faith seems to be predicated on the assumption that if you tell the military to get cracking, that will make something happen. And if you believe that one, I've got a warehouse of Chinese berets to sell you.

By arrangement with the

The hat trick: Fastest track to Chinese arms

chances for success, consider the Army beret crisis. The Army chief of staff, Gen. Eric Shinseki, had a vision of the Army of the future. He called it the Objective Force. All of its parts would be able to move fast and work together in the field without turf battles. And as a first step toward this marvellous goal, the general felt a pressing need for...

HATS. Yes, General Shinseki decided our soldiers might feel more like members of the Objective Force if they all wore the same headgear, specifically black berets. When the general thought of black berets, he thought of the need to "maintain relevance for the evolving strategic environment."

The rest of us, of cours of Monica Lewinsky, but that's why nobody named us chief of

The general wanted every single soldier under a beret by June 14, the Army's first birthday in the new millennium. Last week, when he was being yelled at by the House Committee on Small Business, and having what must have been the worst day of his life that did not involve bullets, he said he believed that making the beret switchover a sort of birthday celebration would "demonstrate that the Army could accomplish this change

effectively and quickly." Will you be surprised, people, to hear that it demonstrated exactly the opposite?

The Department of Defence was given eight months to acquire 1.3 million black berets. Since there was only one medium-sized American contractor with the critical beret-making machinery in hand, many of the orders wound up being placed overseas, outraging American small businesses, not to mention the House Small Business Com-

The overseas suppliers, who were in Canada and England, had their factories elsewhere. Before you knew it, just as the spy-plane hostage drama was playing out, the Army was receiving crate after crate of

By Gail Collins

berets that had been manufactured in China.

Everybody went crazy. "Somebody should be punched for this," said Representative Bill Pascrell of New Jersey, conjuring up the "image of our guys and gals in uniform, taking off these berets to wipe their brows, and reading 'made in China'."

Eventually, the Army promised that no American so dier would ever go off to war wearing a chapeau of Chinese origin. If you have any innovative ideas about what to do with 618,000 surplus berets, drop a note to the Defence Logistics Agency.

The moral of this story is that when it comes to the Pentagon, speed kills. When you hear the president promise to have some sort of a missile shield in place by 2004, remember that there is nothing so disaster-prone as a large military organisation attempting to do something really, really

ast week a Senate subcom-_ mittee held hearings on the Defence Department's promise to quickly train 32 cial National Guard units to respond to domestic terrorism. None of them are functioning, and the office created to manage the program has been disbanded. An audit found that in an attempt to get the units up and

Army promised that no American soldier would ever go off to war wearing a chapeau of Chinese origin. If you have any innovative ideas about what to do with 618,000 surplus berets, drop a note to the Defence Logistics Agency New York Times

Everybody went crazy. 'Somebody should be punched for this,' said Representative Bill Pascrell of New Jersey, conjuring up the image of our guys and gals in uniform, taking off these berets to wipe their brows, and reading

Made in China.' Eventually, the

Wissile defence and India

India has decided to jump on the U.S. bandwagon even before a clear outline of the missile defence system has emerged.

N HIS address at the National Defence University on May 1, the U.S.

President, Mr. George W. Bush, de-clared his intention to deploy missile defences and get out of the 1972 ABM

Freaty which prohibits such deployment

He promised to proceed in this matter in consultation and cooperation with his al-The Government of India's response to ngly swift and positive. Its statement of ies and friends. India is one of the coun-May 2 amounts to an unqualified endorsethe American proposal has been surprisries singled out for consultation.

yet to be demonstrated, when there is a decided to jump on the U.S. bandwagon even before a clear outline of the defence system has emerged and its feasibility is cism and when Russia and China have India's response constitutes a departure ment of the idea of missile defences. India deep division on this issue in the U.S. itself, when most of the U.S. allies view this from its erstwhile position and represents a significant shift in its nuclear policy. India has opposed a defensive weapon system repeatedly in the Conference on Disarmament and the General Assembly of the United Nations and NAM and other multilateral forums. Even the present Government had publicly expressed its reserproposal with varying degrees of sceptivations on it only a few months ago. strong reservations.

view of its inability on financial grounds to ly lost its bargaining power in negotiating unilateral reductions in U.S. nuclear forces and to move away from hair-trigger alerts. But there is nothing new in them as they are very much on expected lines. With the end of the Cold War and the consequent sion of some 7,000 weapons. Besides, in reductions have to be unilateral. The same The Indian statement makes laudatory references to Mr. Bush's intention to make change in Russia's adversarial position visa-vis the U.S., the latter cannot justify before its own people its continued possesmaintain its nuclear stockpile, Russia desperately wants to get rid of a substantial proportion of it. It has, therefore, drasticalnuclear arms cuts. In the event, the U.S.

ogic also applies to de- alerting measures. Several such measures have already been taken after the end of the Cold War and the process is likely to continue in the coming

piece of the Cold War system is nowhere proach. The ground realities, such as strengthening NATO, expanding its mem-Deterrence which has been the centrenear disappearing. The U.S. has always contemplated missile defence as a means of bolstering offence. This is reiterated in U.S. is committed to achieve "credible deterrent" and needs "new concepts of deterrence that rely on both offensive and defensive forces". It is also very difficult to leave behind the legacy of the Cold War bours of Russia and reviving bilateral There is going to be no "clear break from the past" and "from the legacy of the Cold War" with the advent of missile defences. Mr. Bush's remark to the effect that the take at face value Mr. Bush's intention to and rely on a cooperative multilateral apbership by the inclusion of close neighsecurity pacts concluded in the Cold War context are pointers to the opposite direction. Similarly, walking out of the Kyoto Protocol is no indication of a revival of U.S. faith in multilateralism.

wards a "defensive transition" gives rise to The Government of India's belief in the technological inevitability" of moving tosome very serious questions. There is choice. There are always several choices fare of mankind. It is thus our sacred duty nothing inevitable about a technological within the parameters of a given technology. A fundamental challenge to humanity subject technological potentialities of has consistently opposed the nuclear arms moral imperative of eschewing this tempsecurity. In its disarmament policy, India is to harness technology towards the wel-

taking timely preventive measures, of an international monitoring, with a view to those developments in the field of science cal inevitability. We have even proposed and technology which have the potentiality of being translated into new weapon race justified on the ground of technologi systems.

is the only nuclear weapon state prepared All these have created the ideal situation for making a strong bid for a transition to a Bush has clearly stated: "nuclear weapons still have a vital role to play in our security The climate for giving a real push to the objective of elimination has seldom been more propitious than it is today. India has the unique advantage in taking a lead as it to negotiate the total elimination of its nuclear weapons. Several countries enjoying as Sweden, Ireland, South Africa and Brazil have come to realise that elimination is the eration. Global stockpiles of nuclear weapons have been substantially reduced and more drastic reductions are on the cards nuclear weapon-free world. Instead, India has opted for the U.S. missile defence system. Elimination has no place in it. Mr only route to reach the goal of non-prolif considerable international credibility such and that of our allies.

the uncertain and dangerous course of a new weapon system. For, let there be no doubt that missile defences constitute a either try to build their own defences or tems to penetrate the U.S. defence, This will give a new lease of life to the nuclear elimination goalpost and are now adrift in new weapon system. And history is witness to the fact that every new weapon na, which perceive themselves to be expand and improve their offensive sysarms race. In the process, India's own de-We have now deflected sharply from the vailing system. Countries, particularly Chithreatened by the U.S. defence system, will system is invariably matched by a counter-

ess of acquiring or to impose on ourselves options but either to get reconciled to the rity matters that we have been in the procunacceptable economic costs for keeping loss of the modicum of autonomy in secuup with developments in our neighbour-

threatened by it will be taking counter-measures, is going to be highly unstable It is very difficult to make a distinction fensive system which can hit a missile in impunity. Thus the entire world will be held hostage to the country possessing inance over the world. This will undermine bent upon India to consider whether it can Finally, a matter of serious international sive system will be developed and the countries perceiving themselves to the its boost phase from hitting it in its silo. sessing it the confidence to go on the ofence not only in matters of security but concern is that the period when the defenbetween an offensive and a defensive system. For example, nothing prevents a de-Moreover, defence will give a country possuch a system. The more foolproof the system is, the more absolute will be its domalso with regard to the exercise of foreign and domestic policy options. It is incumreally get reconciled to such a world order our and most other countries' independ fensive against its adversary and unsettling for global security.

tan. They find India already in the rank of mailing are a way of life" used by Mr. Bush dia's support for the proposed U.S. missile defence plans on the ground that it will friends. And they read Pakistan in the "friends" are flexible categories and the ular country is subservient to the U.S. interests. Our independence and sovereignty may have to be seriously compromised for the purpose of remarking in the to describe "rogue states". They, however, not realise that "rogue states" and Some commentators have justified Inprotect India from countries such as Pakisphrase "states for whom terror and blackinclusion in and exclusion from these categories will depend upon how far a particcategory of "friends" ဝှ

India justifies stand on

STATESMAN NEWS SERVICE AND AGENCIES

NEW DELHI, May 3. – India's positive reaction to the US decision to begin work on a national missile defence programme was a "considered statement," a foreign ministry spokesman said today. India denied it had reacted hastily, though the Opposition, notably the Congress, called it "hasty," and "thoroughly premature and dangerously immature."

Does India no longer oppose the NMD programme? The spokesman said New Delhi's concerns were part of the dialogue

process with Washington.

India had welcomed the US announcement of unilateral reduction of its nuclear forces and to move away from the hair-trigger alerts associated with prevailing nuclear

The spokesman said India believed there was a "strategic and technological inevitability" in stepping away from a world held hostage by the mutually assured destruction (MAD) doctrine to a cooperative, defensive transition that was underpinned by further cuts and "de-alert" of nuclear forces. India had stood steadfast in its commitment to global

disarmament. It had been advocating what was announced by

Mr George Bush, he said.

The Congress spokesman, Mr Natwar Singh said: "We want to emphasise and caution the country that the acceptance of the package constitutes a decisive paradigm shift in nuclear policy and breaks the international consensus."

The foreign ministry spokesman welcomed the visit of deputy secretary of state, Mr Richard Armitage, for talks and the US resolve to seek dialogue, consultation and cooperation.

THE STATESMAN

- a MAY 7M1

Cong. flays Govt. on hasty reaction to NMD

By Our Special Correspondent

NEW DELHI, MAY 3. The Congress to-day expressed surprise at "the haste" with which the Centre had endorsed the U.S. President, Mr. George W. Bush's nuclear doctrine. Articulating his party's point of view on the issue, the Congress Working Committee member and chairman of its external affairs department, Mr. Natwar Singh, said "the Government's reaction did not serve India's interests as it was thoughtlessly premature and dangerously immature."

The Government should have "applied its mind, consulted other political parties and weighed the pros and cons" before rushing to endorse the doctrine. It was all the more glaring that while even the U.S. allies like the U.K. and the European Union had reservations, as did important countries like China and Russia, "India alone thought it fit to welcome the treaty."

Expressing "grave concern," Mr. Singh asked the Government to explain the reasons behind the tearing hurry. Accusing the Government of "surrendering its room for manoeuvre," he said the endorsement marked a paradigm shift in nuclear policy and violated the national consensus that had existed for decades.

Mr. Singh said there were some parts in Mr. Bush's package "that may appear reasonable" — like the cut in the number of nuclear warheads — yet, a package had to be "judged in (its) totality."

The Congress would like to make a deeper study of the package in all its ramifications. It was only natural that the NDA Government, which had "destroyed a national consensus" on the issue in May 1998, would go along with the destruction of the international consensus.

Mr. Singh also stressed that India was a leading light of the Non-Aligned Movement and had consciously decided to stay away from power blocs. The Govern-

ment, however, had abandoned that policy. "We are not a satellite State and should not be in any camp," he said.

The Congress was for close Indo-U.S. ties in commerce, trade,

The Congress was for close Indo-U.S. ties in commerce, trade, science and technology and many other areas. "The world's most popular democracy and the world's richest democracy have many shared interests and goals" but the "Vajpayee Government's reaction does not illuminate this shared vision."

'Not a hasty welcome'

NEW DELHI, MAY 3. The Government today rejected the criticism that it had reacted in haste to the U.S. President, Mr. George W. Bush's announcement of a new framework for security and stability, saying it was a "considered" view in keeping with the larger global impact.

"It was a considered statement," an External Affairs Ministry spokesman told presspersons when asked why New Delhi was in a tearing hurry to applaud the announcement.

On whether India had moved away from its opposition to the U.S. national missile defence programme, the spokesman said New Delhi's concerns were part of the dialogue process with Washington. India had welcomed the U.S. announcement of unilateral reduction of its nuclear forces and its decision to move away from the hair-trigger alerts associated with prevailing nuclear orthodoxies.

India believed that there was a "strategic and technological inevitability" in stepping away from a world that was held hostage by the doctrine of mutually assured destruction to a cooperative, defensive transition that was underpinned by further cuts and de-alert of nuclear forces.

India, which was steadfast in its commitment to global disarmament, had been advocating what had been announced by the Bush administration, the spokesman said. — PTI

THE ALLE

New Delhi's Cause Needs To Be Examined

By JK DUTT

HE George W Bush administration's rumblings over the nuclear issue of maturity, stoicism and sanihave created considerable dis- ty. This was wholeheartedly may in international spheres. appreciated by the internatiothe Opposition, they had re- not signing the CTBT till our fused to ratify the controversial own weaponisation fructifies Comprehensive Test Ban Treaty. It now appears that this was efforts to push through the armtwisting the threshold ly covered by nuclear umbrel- denuclearisation and this gets

nuclear states to toe their line or face the consequences.

Nowhere has the CTBT got into such a predicament as in the Indian subcontinent. India's case, and arguably Pakistan's too. merits consider-ation. The com-plete CTBT procedure is, a country wishing to become a member of the Treaty has to sign it, get it ratified by governmenť. its and then register instrument with the United Nations. India has been fence-sitting

Treaty opened for signing in and has to fend for itself for its September 1996. There are own security, be it conventional several factors pertinent to or otherwise. Hence it does not India's cause which need to be behoove these countries to ride examined with an open mind.

NO ROGUE

has been compounded by virtue ted over the safety and, more ed, India may have implemen- accidents in nuclear plants. ted the CTBT without any re- Chernobyl, Three Mile Island, should run parallel with USAservations notwithstanding and Tokaimura are examples. Russia parleys on the nuclear Pokhran '74. However, Pokh- It was thus considered prudent issue. If these two powers can ran '98 injected a whole new to include a clause in the CTBT be trusted in this context, so dimension because now we are under which "... the President can be India with perhaps Pakbeing formally addressed as a of the United States in conistan taking a cue. Ironically, juncture is weaponisation. This tives of the Treaty for reasons implies formulating an opera- of supreme national interests tional nuclear doctrine - a in order to conduct whatever draft of this is already in vogue tests as might be necessary ..." arsenal to complement this doc- could effect such a clause as a acquiesce? trine. The compulsive change precondition to signing. in the pattern of warfare will be the employment of mass destruction weapons alongside regular ones. It would, therefore, be premature for us to international relations implement the CTBT till we have developed a full-fledged politico-military codification in thing in return for signing the keeping with the revised deployment methodology of the seat in the UN Security Coungamut of our military weapons.

prove that it is not a "rogue" nuclear state, this sobriquet bership would soon be apalready having been bequeat- proaching the 200 mark, so hed on us by Washington. There should not be any cir- the incumbency in the UNSC to cumspection about this dis- proportionately increase. The tasteful term as in all its 53 years of Independence, India for anointing to the UNSC have has never equivocated in its been creditably vouchsafed by honesty of purpose on the field India. A look at India's record of battle. Kargil was the latest in UN peacekeeping missions proof. Had we crossed the Line over the past five decades is of Control in Kashmir during adequate. the Kargil operations, the fallout would have been an countries that have implemenuncompromising all-out confla- ted CTBT did so after adopting its land borders with the Cengration with the possibilities of the same course that India is tral Asian Republics. China escalation in the entire region following today. The other via a nuclear cloudburst. We three N5 members are yet far tiative over Taiwan on the one took very heavy casualties in Kargil yet our approach to the conflict reflected a combination

The author is Lt. Col. (retd.), Indian Army.

When the Republicans were in nal community. Therefore, our should not be taken amiss.

urity paradigm. Presumably well as technological. The talk-

DEBABRATA____

on the CTBT ever since the las. India has no such facility export of nuclear technology; a moral horse.

The fourth factor is usually not made public. During 1995, First of all, India's problem the US Administration ruminaof Pokhran II and by default, important, the reliability of its Chagai. Had this not happen- nuclear arsenal in the light of nuclear power. Logically, In- sultation with the Congress when the N5 was busy devedia's prime requirement at this can depart from the impera-- and building up a nuclear Thereby hangs a tale! India too should the N5 not gracefully

DISPARITIES

Lastly, why should we not serve the traditional riposte in 'What's in it for me?" India has every right to ask for some- adequate nuclear stockpile viscil. It would be grossly unfair Second, India is required to for the N5 to have it their way, mitigate its economic privation, all the way. The UN memthere is every justification for terms and conditions obligatory

different for India?

The existing disparity between the nuclear "haves" and those that "have less" appears covertly deliberate. An equitable concept of security where either all nuclear powers led by the N5 should go in for wholesale disarmament or where a Third, the subject of sanctions judicious distribution of nucbrinkmanship, witness their demands some introspection. lear umbrellas should ensure There is no gainsaying that we security for all threshold nuc-National Missile Defence sec- do need aid, both financial as lear states, is essential if nuclear justice is desired. Neither they will soon display their ing point is, most donor coun- is feasible, for obvious reasons. true colours on the CTBT by tries are themselves adequate- An asymmetry prevails in

> heightened due to unrealistic stipulations that the N5 wish to impose on the threshold states.

The previous US government had suggested a method to pave the way for India and Pakistan for signing the CTBT on the caveat that Kashmir is acknowledged as the world's most dangerous nuclear flashpoint. The five-pronged suggestion comprises a moratorium on further testing; restraint in the deployment of nuclear arms; curbing the

and resumption of dialogue at both Tracks One and Two levels. Suspicion has been particularly levied on the delivery systems as these may be prone to become unreliable.

FAILED TREATY

The suggestion package sounds fine but should be accommodated by us with a proviso, namely, the proposal Russia parleys on the nuclear loping their own nuclear clout, India cried itself hoarse trying to dissuade them but met with no success. Today when the roles have been reversed, why

Oddly enough, the recent Pakistani senior military commanders' conference presided over by General Pervez Musharraf apparently came to an agreement that Pakistan can sign the CTBT as it possesses an a-vis India. This sounds im-CTBT, ideally a permanent plausible. It can be reasonably assumed that Pakistan wants sanctions to be lifted to hence such a politically conciliatory communique has been

effected by its ruling clique. One fact of life is explicit. The world's sole superpower has no right to pontificate on the CTBT while brazenly expanding its own military nuclear parameters. Asian regional stability is in the process of getting disbalanced.

China, for instance, is producing its version of Star Wars France and England, the two to protect its interests in the South China Sea as also along will certainly not lose its iniaway from completing the side and Tajikistan on the CTBT formalities. No one ques- other. Consequently, the CTBT tions their bona fides, never is set to lose its very purpose mind the two clearly divergent and will ultimately get conscategories of the N5 group, igned to the annals of a Why should it be radically fruitless exercise.

India unmoved by Pak. line on CTBT

By C. Raja Mohan (1) - 13

NEW DELHI, MARCH 21. India is unlikely to modify its current position on the Comprehensive Test Ban Tleaty even if Pakistan, under economic compulsions, decides to sign the agreement to ban nuclear testing worldwide. Irrespective of the Pakistani decision, India is

expected to continue with the unilateral mo-

ratorium on nuclear testing while staying away from the treaty.

When the Prime Minister, Mr. Atal Behari Vajpayee, visited to the United States last September, India had declared that it would abide by the moratorium until the CTBT came into force. Indications here are that there will be no change in this policy.

With the U.S. no longer championing the treaty, India has virtually put on hold all efforts to build a domestic consensus on the CTBT. Given the current political mood in the country, there is no prospect for an early parliamentary debate on the subject.

Responding to reports from Pakistan that the military regime of Gon. Pervez Musharraf is getting ready to sign the CTBT, sources in the Government say New Delhi's approach to nuclear treaties has never been tied to that of Islamabad. In contrast, they add, it is Pakistan which has always insisted that it would sign various nuclear treaties only if India joined them. If Gen. Musharraf does indeed sign the CTBT, it may be an interesting departure from the notion of political parity with India that has been so dear to Pakistan.

There is considerable skepticism here of Gen. Musharraf's ability to overcome internal political opposition to Pakistan inking the CTBT when India remains outside it. Earlier efforts by the Musharraf regime to rally domestic support for signing the CTBT were unsuccessful, thanks to the hostile reaction from Islamic parties and jehadi groups.

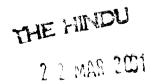
But if it can get away with it at home, diplomatic sources here say Pakistan may have a rich harvest to reap from signing the CTBT. Although the Bush administration is opposed to it, there is strong residual support in the U.S. to the CTBT, and Islamabad could expect to score some political points vis-a-vis India.

Japan and all the European countries want

an early implementation of the CTBT and would be pleased to see Pakistan sign the treaty. The decision to delink itself from India on the CTBT could certainly help Pakistan ease some of its current international isolation.

On the economic front, the rewards could be immediate and tangible. Tokyo is believed to have told Islamabad that it will review its economic sanctions after Pakistan signs the CTBT. The renewal of Japanese bilateral assistance, worth about \$500 million per annum, should be of great help to Pakistan which is in a difficult economic situation. The CTBT decision could also facilitate more assured multilateral lending to Pakistan.

Gen. Musharraf may have calculated that by signing the CTBT, he could present Pakistan in a more favourable light than India on non-proliferation issues, and halt the recent diplomatic advance by India. Although the gains for Pakistan from signing the CTBT are real, a big question remains to be answered. Does Gen. Musharraf have the political gumption to delink Pakistan's nuclear policy from that of India?



U.S. wanted India to detonate N-bomb in '64, reveals Dixit'

The Times of India News Service MUMBAI: Former foreign secretary J.N. Dixit has disclosed that the U.S. wanted India to detonate a nuclear bomb prior to the Chinese N-test in 1964.

Delivering a lecture on 'India in World Affairs—Nehru Revisited', organised by the Nehru Centre here on Saturday, Mr Dixit said that the suggestion was made by former U.S. secretary of state Dean Rusk to former prime minister Jawaharlal Nehru. Mr Rusk reportedly told Mr Nehru, "We will be supportive of your action."

"But Mr Nehru opposed the spread of N-weapons and rejected the American proposal," he said. However, years later, he gave the go-ahead for the reprocessing of plutonium which led to the development of N-weapons.

According to Mr Dixit, China will exercise greater caution in dealing with India since this country has N-weapons and is now in possession of intermediate range ballistic missiles.

"We must attain a higher capability both in terms of troops deployment and our reach, keeping in view our security interests," he said.

Mr Dixit, who was foreign secretary between December 1991 and January 1994, recalled that former prime minister P.V. Narasimha Rao had planned to test N-weapons on two occasions during his tenure.

"But the decision was deferred because the nuclear scientists wanted to develop a hydrogen bomb," he said.

Referring to Mr Nehru's foreign policy, he said he had aimed for good relations with Pakistan despite all the antagonism. But Pakistan's defence ties with the U.S., along with Pakistan's military collaboration with China, had come as a hurdle to Mr Nehru's plans to have a good relationship with Pakistan. "The signing of the Indus Water Treaty was the only foreign policy achievement of Mr Nehru with regard to Pakistan," he stated.

According to him, the strategic environment turned critical

because of the Pakistan-Chinese defence link. He said he did not foresee any normal relations with Pakistan until they (Pakistan) were "exhausted". According to him, goodwill missions and lighting candles on the Indo-Pakistan border had proved ineffective. "The candles which we light are blown off by them," he said.

THE TIMES OF DIDIA

'Akash' ready for user tests

NEW DELHI, MARCH 8. India's advanced multi-target surface-to-air missile, 'Akash,' has successfully completed trials and will be ready for serial production after user tests by the Indian Air Force, official sources said

cial sources said.

After undergoing a series of successful tests from February 27 to March 5, the main objective of proving the missile's command and guidance systems and target engagements had been met, they said.

said.

"The DRDO used indigenously developed Rajendera multi-function radar and both the Lakshya and the pilotless target aircraft (PTA) for simulated targets," a Defence Ministry statement said.

The quick look analysis of the telemetry had indicated that target engagements had been "met."

'Akash', with a capability of taking on targets from tree-top up to 25 km height is powered by a Ramjet engine. Scientists and engineers from nine laboratories of the DRDO, Bharat Dynamics and Bharat Electronics were involved in the project. — PTI

THE HINDO

- 9 MAR 2001

Indian nuke plan still on: C

INDIA is continuing its nuclear weapons development programme and relies on foreign assistance for key missile and dual-use technologies, which it gets from entities in Russia and western Europe, the CIA claimed in its semiannual report to Congress.

"India continues its nuclear weapons development programme for which its underground nuclear tests in May, 1998, were a significant milestone," it said in the report - 'Acquisition of Technology relating to weapons of

PRESS TRUST OF INDIA) mass destruction and Advanced WASHINGTON, FEBRUARY 27 Conventional Weapons'. India, the American Central Intelligence Agency claimed, continues to rely on foreign assistance for key missile and dual-use technologies, where "it still lacks engineering or production expertise in ballistic missile development".

Entities in Russia and western Europe remained primary conduits of missile-related technology transfers during the first half of 2000, it said. "The acquisition of foreign equipment could benefit New Delhi in its efforts to develop and produce more sophisticated nuclear weapons," it said, adding,

"India obtained some foreign assistance for its civilian nuclear power programme during the first half of 2000, primarily from Russia."

The CIA claimed that India is continuing an across-the-board modernisation of its armed forces through advanced convention weapons (ACW), mostly from RusA sia, although many of its key pro-\ grammes have been plagued by delays. Despite overall improvements in Russia's economy, the CIA said, the state-run defence and nuclear industries remain strapped for funds, even as Moscow looks to them for badly-needed foreign exchange through exports.

INDIAN EXPORT 28 FFA 2001

India defends N-fuel import STATESMAN NEWS SERVICE USA said the fuel supply vio Cear Suppliers Group, Russia

STATESMAN NEWS SERVICE

NEW DELHI, Feb. 20. - India today reiterated its stand on import of nuclear fuel from Russia for the Tarapur atom-

ic power station.
"All imports of fuel for Tarapur atomic power station has always been under the International Atomic Energy Authority regime", India said, reacting to the US pressure on Russia to cancel the nuclear fuel supply.

The US opposition has taken the country by surprise since it comes at a time when the new Bush administration has just taken over. USA was involved in the construction of the power station in the past.

USA said the fuel supply vio-lated Moscow's obligations as a member of the Nuclear Suppliers Group.

Meanwhile, Pakistan today

expressed fears that the shipment of fuel would only further widen the existing imbalance in South Asia.

"The shipment also highlights the discriminatory practices being adopted by the individual N-member states," said Pakistan's foreign office spokes-man Mr Riaz Khan while expressing concern that it would only enhance Delhi's nuclear capability.

The US state department's deputy spokesman, Mr Philip Reeker, earlier said: "As a member of the 39-nation Nu-

clear Suppliers Group, Russia is committed not to engage in nuclear cooperation with any country that does not have comprehensive IAEA safeguards on all its nuclear facilities. Although India's Tarapur reactors are under IAEA safeguards, India does not have such safeguards on all its facilities and is indeed pursuing nuclear weapons programme".

The foreign ministry spokesman replied that India has consistently and impeccably observed the IAEA safeguards and Tarapur's latest import from Russia is "similarly covered under the IAEA guidelines and IAEA has been informed about it".

THE STATESMAN

9 1 1 1 6 2 2001

Agni won't escalate of the arms race, says George

PRESS TRUST OF INDIA

PATNA, JAN 18

DEFENCE Minister George Fernandes today sought to allay



fears that yesterday's successful test firing of Agni-II missile would heighten tension and escalate an arms race in the region.

"The hugely successful test-firing of Agni-II will not escalate an arms race in the region because we see it as an effort to acquire a credible minimum deterrent needed for India's securityNobody should be worried about India's intentions, "Fernandes told reporters at the Bihar regimental centre at Danapur near here.

"We remain committed to elimination of all weapons of mass destruction and want nuclear superpowers to take the lead," he said, adding India was irrevocably committed to no first use of nuclear weapons.

Asked if the centre was considering not to extend the unilateral ceasefire in Jammu and Kashmir beyond January 26 when it expired following sudden spurt in militant attacks, he said the situation was being continuously monitored and a final decision would be taken at an appropriate time.

He, however, said the ceasefire had shown some positive results as firing along the border with Pakistan had ebbed. "But we remain deeply concerned about the continuing violence by foreign mercenaries trained and equipped by Pakistan...... We hope Pakistan will do something to keep a tight rein on them," he said. Fernandes said with the successful test-firing of Agni-II India had bridged the key gap in its minimum nuclear deterrent profile by acquiring the delivery system. Congratulating Indian scientists on successful test flight of the Light Combat Aircraft (LCA) at Bangalore earlier this month, the Defence Minister slammed those questioning the quality of the fighter aircraft and the time it took to be manufactured.

"Everywhere in the world it takes no less then 12-13 years to lesign and manufacture such airraft...The supersonic fighter is the ightest combat aircraft in the world," he said.

He said the LCA would further strengthen the country's already formidable air defence capabilities ext less

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FRIDAY, JANUARY 19, 2001

FIRE IN THE SKY

x0-

WHEN AGNI-II UNDERWENT its first test flight in April 1999, the Indian defence establishment claimed that the missile system was fully operationalised. The Defence Minister, Mr. George Fernandes, suggested that Agni-II was combat ready while the DRDO chief and India's "missile man", Dr. A. P. J. Abdul Kalam, was quoted as saying that the test flight was "the culmination of our efforts to make our IRBMs operational". It was generally assumed then that no more tests were required and that no more would be conducted. Against this background, a second test of Agni-II, in which the missile was tested in its "final operational configuration" almost two years after the launch in 1999, is something of a surprise. All the same, the recent test flight is another step towards the BIP Government's declared goal of developing a 'credible' nuclear deterrent capability. When the missile system is inducted, India will have the capability to strike at targets over 2,000 kilometres away (up to 3,000 kilometres using specific payloads, according to some estimates). loads, according to some estimates).

In both military and scientific terms, Agni-II is a huge stride in missile technology development — it uses a solid propulsion system in the second stage (replacing the liquid propellant used in its predecessor, Agni-I), can be launched in 15 minutes (as opposed to half a day), uses far more accurate navigational and guidance systems and is designed to operate on a highly mobile platform which lends flexibility and reduces vulnerability to strikes. The first test flight had triggered a wave of criticism from the U.S., China and a host of other nations about an escalating arms race in the region and had provoked Pakistan to fire Ghauri II (Hatf-V) and then boast that its response had not only matched India but exeeded it. The second test flight will engender

similar concerns in different parts of the world. Moreover, it will provoke hardly any astonishment if Pakistan retaliates by testing a solid-fuelled missile — possibly the so-called Shaheen-II, an IRBM probably developed with the help of Chinese technology. In all probability, as recent history has demonstrated, the test flight of Agni-II is likely to trigger a similar action from Pakistan.

The timing of the second test flight will result in the inevitable suspicions, having coincided with the official visit to India of China's Mr. Li Peng, Chairman of the People's National Congress and second most powerful politician in that country. Agni-II is believed in some quarters to have been designed principally as a deterrent against China even though it does not have the reach to threaten most Chinese cities, including Beijing. (This may alter with the development of Agni-III, which with its 3,500-kilometre range is capable of engaging targets deep within that country.) Having revived the IRBM programme, after it was put on ice in 1994 following severe U.S. pressure, the pro-nuclear BJP Government is apparently determined to drive it forward as far as possible. The attempt to develop new missile technologies is married to the Government's larger programme of developing a nuclear deterrent. Along with landbased missiles, the country is now actively pursuing the development of air-based and sea-based nuclear delivery systems. Against such a background, it is difficult not to meet Agni-II's successful test launch with a mixed response. On the one hand, there is a certain sense of pride in the scientific achievement, but on the other hand there is a definite sense of apprehension about the impact of this latest event on a worrying and constantly escalating arms race.

THE HINDLI

19 JAN 281

ni II successfully test-fired

Shishir Gupta New Delhi, January 17

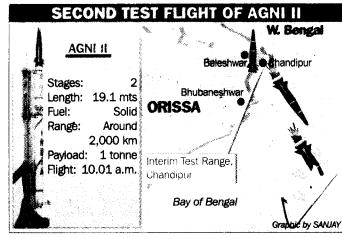
NDIA HAS bridged a key gap in its minimum nuclear deter rent profile with the long range Agni II missile now ready for battle. The 2,000 kilometre intermediate range ballistic missile (IRBM) was today test-fired for the second time from a mobile launcher in

A Defence Ministry statement simply said: "The second flight of Agni II missile was conducted at 10.01 am from Interim Test Range (ITR), Chandipur, Orissa, in its final operational configuration." According to Programme Director R.N. Agarwal, the flight test results have indicated that the "mission objectives were met satisfactorily."

This means that various parameters of the missile have been frozen and the missile is a step short of induction into the Indian armed forces.

According to the Foreign Office spokesman, members of the UN Council and were informed prior to the test-fir-ing of Agni II. A 'notem' (cautionary notice) was also issued to aviators and mariners to keep away from the area of splashdown in the Bay of Bengal.

It is significant that the missile was test-fired immediately after Mr Li Peng, Chairman of National Péople's Congress of China and



number two in the Chinese political hierarchy, left the Indian shores after a nine-day official visit. Perhaps, the test-firing of the missile was timed to give a signal that the weapon was not a China-specific but designed purely to address the Indian concept of a credible minimum nuclear deterrent.

It is understood that approval for second test-firing of Agni II missile was taken at the highest levels of the NDA Government last August. The testfiring was apparently scheduled to take place soon after Prime Minister Vajpayee's September visit to the United States.

Agni II had reached its "point of operationalisation" after it was first tested on April 11, 1999.

The significance of test-firing Agni II in its "final operational configuration" is linked to Pokhran II nuclear tests in May 1998. While the 'Shakti' series of nuclear tests gave India the capability to design a wide range of nuclear warheads, it did not address the question of delivery systems. India did not have a missile—a preferred option for nuclear delivery—which could hit land targets at a range of 2,000 km and beyond.

The second flight of Agni II this morning has resolved this issue to some extent and for once India's minimum deterrent concept looks credible.

Last week, the Chief of Army Staff, General S. Padmanabhan,

went on record saying that the Indian nuclear deterrent was now credible and could survive a first nuclear strike.

India's nuclear deterrent profile is configured on a triad concept. This means having the capability to launch a nuclear attack from land, air and sea-based systems.

The test-firing of Agni II described as a two-stage, all solid motor missile with a range of around 2,000 km-from a mobile Jauncher forms part of the landbased nuclear deterrent.

As far as the air-based deterrent goes, the Indian Air Force (IAF) calls itself a strategic force and has multi-role fighters such as Sukhoi-30 and Mirage-2000 which could fulfil a nuclear role. The Indian Navy is currently negotiating with Russia for the purchase of four Tu-22 long range aircraft. Besides long range maritime reconnaissance, these aircraft are known for their nuclear capability.

The Navy is also working on a nuclear submarine project, which will have a key role in India's second strike capability. Work on this advanced technology vehicle (ATV) project is said to have picked up in the recent months. It is learnt that the Navy is even thinking in terms of acquiring a nuclear submarine on lease to nuclear submarine on lease to train its personnel. However, till that time, New Delhi will have to make do with Agni II. Brahma Chellaney's analysis on Pg 8

THE HINDUSTAN TIMES

1 8 JAN 2001

Farewell to Li Peng with Agni II testfire

FROM PRANAY SHARMA

New Delhi, Jan. 17: India today "successfully" testfired the Agni II missile that can target Beijing, among other cities, hours before Chinese leader Li Peng left the country after a nine-day "goodwill" visit.

The "2000-plus"-range surface-to-surface missile can also target Pakistan and all its important installations and cities.

It was the second test of the upgraded version of the original *Agni*. The first was held in April 1999, prompting tests within days by Pakistan of its medium-range *Ghauri-II* missile.

Today's testfiring, conducted at 10 am from the interim test range at Orissa's Chandipore, is significant because the sophisticated technology involved makes the long-range missile "more accurate and precise" while carrying the nuclear warhead to its intended targets.

Though China did not react. Indian officials rushed to clarify that the test was not directed against any "particular country" and was part of Delhi's long-range weapons system necessitated after the May 1998 nuclear blasts. They argued that "the timing was determined solely by technical factors like weather conditions and system-snags".

But indications are that the move, though a foregone one, is also deliberate. That India does have the long-range weapons capability is a factor which will not be ignored by the Chinese during future talks.

China, along with the other P-5 nations — the US, Russia, France and UK — was given advance notice of the test this morning. So were Pakistan, Japan and Germany.

The all solid fuel-propelled

missile has a range of 2,500 km, but officials diplomatically pegged it at "2000-plus". The defence ministry said *Agni II*, which can carry a one-tonne warhead, can be fired from a mobile launcher.

"The flight test results have indicated that mission objectives were met satisfactorily," Prof. R.N. Agarwal, programme director, was quoted as saying in a defence ministry statement.

Prime Minister Atal Bihari Vajpayee congratulated the Defence Research and Development Organisation (DRDO) on the successful test flight.

Li did not indicate that anything was amiss. Addressing Cabinet ministers of Andhra Pradesh in Hyderabad this morning, the Chinese leader, on the last leg of his journey, stressed the need for bilateral cooperation in trade and technology. "It will be beneficial to us if we cooperate in areas of mutual cooperation," the Chinese

Premier said.

The Agni II is more than a match for China's Dong Feng-21, which has a range of 1,800 km and can hit key cities in Japan, Taiwan and, possibly, India.

Pakistan has deployed the Shaheen-I, which has a range of 700 km but is propelled by liquid fuel. The Shaheen-II, which Islamabad claims has a range of 2000-plus km, though displayed, has not been tested yet.

India believes the Chinese are closely helping Pakistan in its missile programme, particularly in the development of the Shaheen-II, which is based on solid-fuel fabrication.

Delhi has often complained to Beijing about its defence cooperation with Islamabad. But despite acknowledging India's concerns, there is little to indicate that China has stopped aiding Pakistan.

■ See Page 7

THE TELEGRAPH

18 JAN 2001

Agni-II test takes India closer to deploying N-arms

By Dinesh Kumar and Manoj Joshi

NEW DELHI: By conducting the second flight test of its 2,500-km range Agni-II intermediate range ballistic missile (IRBM) from a mobile launcher at the interim test range in Chandipur-on-sea in Orissa, India on Wednesday took another decisive step towards its stated goal of deploying a credible nuclear deterrent.

Although it was the second Agni-II test, it was the first time that the missile was test-fired "in

its final operational configuration" "The flight test results have indicated that the mission objectives were met satisfactorily.' programme director Prof R.N. Aggarwal was quoted as saying.

Among those present during the test were defence minister George Fernandes, his scientific advisor V.K. Aatre, air force chief Air Chief Marshal A.Y. Tipnis and army vice-chief Lt-Gen V.K. Oberoi.

Though it was probably coincidental, observers are bound to comment on the timing of the test. Li Peng, chairman of China's National People's Congress and reputedly the second-most powerful man in that country, is on an official visit to India. Many Indian commentators have in the past commented adversely on the fact that China had conducted a nuclear weapons test during an official visit of an Indian

President in the early 1990s.

Given its range and India's geopolitical situation, most observers say that Agni is being designed as a deterrent against China. If that is the case, India has some way to go since with its current range, the Agni-II can at best cover Chinese territory till the western cities of Chengdu and Kunming, if based in the central plateau of Bihar. Even if based in Assam, a somewhat improbable scenario, the missile would not be able to reach either Shanghai or Beijing.

For this purpose, India is developing the Agni-III, a longer range missile capable of reaching targets of up to 3,500 km. The first test of this vehicle, which will feature entirely new first and sec-

ond stages, is likely to take place later this year.

Significantly, an external affairs spokesperson stated that both Pakistan and the P-5 nations had been given advance information on the tests. He, however, did not specify when the six countries had been informed.

There is little doubt that the Indian test will be followed by a Pakistani test of its solid-fuelled Shaheen-II missile. The missile was first displayed during the Pakistan Day parade last March, and for over a year Pakistani scientists have said they were awaiting orders to go ahead with the test of the missile, which is of Chinese origin.



THE TIMES OF INDIA

/ AN Deterrent Agni Garage

With the second successful testing of Agni II, India has consolidated its status as a credible nuclear missile state. The test has not come a moment too soon; together with the earlier flight test of the LCA it restores to large measure the credibility of the Defence Research and Development Organisation which recently had received a severe battering from the media and the defence services. Further tests of Agni II should be carried out in quick succession, so as to facilitate its early production Learning from the experience of other countries, India has decided to opt for a solid fuelled missile which can be rail and road mobile. Such mobility will enhance the survivability of the missile against attack. An adversary can never be sure of eliminating all retaliatory capability; this uncertainty would make for an adequate deterrence against a contemplated first strike. The solid fuelled mobile missile is in keeping with India's commitment to no first use. The missile was originally planned in the mid-1980s, along with the development of a nuclear capability, as a deterrent against all possible nuclear adversaries. This is the culmination of a national effort, and credit ought not to be attributed to any one political party.

attributed to any one political party. Agni II has been tested during Li Peng's visit to India, just as the Chinese carried out a major nuclear test during President Venkataraman's visit to China. The timing might be purely coincidental, though it may also send a message to Beijing which refers to India as a 'major nation' in the South Asian region while China considers itself to be a global power. The Indian geo-stationary satellite is also likely to be launched within the next few weeks, establishing the country's comprehensive missile capability. While some reaction from Islamabad is likely— Pakistan may fire off a missile or two procured from China or North Korea — there is no need to be unduly concerned about an arms race. China has already given Pakistan a solid rocket-fuel plant at Fatehjung, and some 80 M-11 missiles. Any further transfer of missile technology from China to Pakistan in contravention of assurances given to Washington would only convince the incoming Bush administration that national missile defence (NMD) and theatre missile defence (TMD) are absolutely vital for US security in view of Beijing's proliferation proclivities. China needs to be careful not to provoke the US) In his report, the new defence secretary-designate, Donald Rumsfeld, had cited the possibility of nuclear and missile proliferation by certain powers as the basis for the US compulsion to go ahead with NMD and TMD. This is likely to be a more significant subject for future Indo-US security discussions than conventional non-proliferation, which till now has featured in the talks between Jaswant Singh and Strobe Talbott. The forthcoming Sino-Indian security dialogue is also likely to become more meaningful with the Indian Agni tests. Now is the time for New Delhi to broach to China a proposal for a mutual no first use declaration in respect of nuclear weapons. This would be a significant supplement to the agreement of maintenance of peace and tranquillity along the

ine of Actual Control

THE TIMES OF INDIA

DETERRENT POWER A Nuclear Force Structure For India

NATION'S nuclear force structure depends on its nuclear doctrine and deterrence philosophy. These are essentially based on its civilisational values and its national security strategy, its mastery of nuclear weapons technology and delivery systems technology, the availability of weapons-grade fissile material and the fiscal constraints that govern its defence budget. Though nuclear weapons are no longer weapons of warfighting, the capability and readiness of the armed forces to

absorb these weapons and adapt themselves to the requirements of the nuclear age determines the size of the nuclear force structure at any point in time. Nuclear forces structures are complex, multifaceted entities and take years of effort to build and consolidate.

Nuclear weapons are political weapons and not weapons of "warfighting". Their sole

the threat of use of nuclear weapons. India has justifiably opted for a minimum deterrence doctrine with a no first use policy. This implies that, if deterrence fails, India is willing to absorb a nuclear strike before retaliating in kind) Hence, the best deterrence strategy would be a "counter value" strategy that targets the adversary's major cities and industrial centres in a retaliatory strike.

RETALIATION

India's targeting philosophy must be based on a counter value strategy of massive punitive retaliation to inflict unacceptable damage against the adversary's population centres and industrial assets. The retaliatory strike should be massive regardless of the level (quantum, yield, type of target, location) of a first strike against India and its armed forces. India's nuclear force structure should be so organised that the warheads and their delivery systems are able to survive a first strike in sufficient numbers to be able to inflict "unacceptable damage' on the adversary in a retaliatory strike.

With a minimum deterrence doctrine, it is not necessary to match the adversary's warheads and delivery systems number for number. Deterxence is ultimately a mind game. As long as India's nuclear-armed adversaries perceive that India possesses a viable number of survivable nuclear warheads to destroy their major cities in a retaliatory strike, they would be deterred from launching a first strike. The survivability of India's nuclear arsenal can be ensured by redundancy in numbers, through wide dispersion of nuclear warheads and delivery systems over peninsular India. This can be done by having rail and roadmobile missiles in addition to air-delivered warheads and by investing in a limited number of difficult-to-detect nuclear powered submarines with sublaunched ballistic missiles.

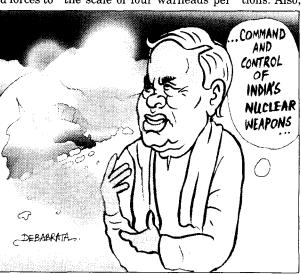
The development of a retaliatory targeting capability for destroying eight to ten major population and industrial centres in China and Pakistan, India's major nuclear-armed adversaries, would be adequate to meet the requirements of deterrence. However, in order to allow for the inherent

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inaccuracy of ballistic missiles (circular error probable — CEP of between 500 to 1,000 metres) and the failure of some of the delivery systems to reach their targets due to the possibility of interception in flight, it would be necessary to launch a larger number of missiles and aircraft than may be actually required.

total of 40 nuclear warheads (at the scale of four warheads per



purpose is to deter the use and target) would be adequate to even unauthorised use cause unacceptable damage in a retaliatory nuclear strike if the CEP of the delivery systems is taken to be 1,000 metres and an assurance level of 0.7 (about 70 per cent) is considered acceptable. If the efficiency or overall reliability of the whole system is taken to be between 0.5 to 0.6 (50 to 60 per cent), a reasonable assumption for a modern nuclear force, then 75 warheads must actually be launched for about 40 to 45 warheads to explode successfully. Hence, a minimum of 75 warheads and, of course, their delivery systems must survive Indian targets. Despite maximum possible concealment and dispersion measures having been taken, including the emplacement of dummy warhead storage sites and dummy moper cent of the nuclear warheads and delivery systems strike. It would, therefore, be prudent to plan a warhead stocking level of twice the number required to be launched, that is, 150 warheads.

REQUIREMENT

The last aspect to be catered for is a prudent level of reserves for larger than anticipated damage to own nuclear forces in a first strike and for unforeseen eventualities. Escalation control and war termination strategies would also be dependent on the ability to launch counter-recovery strikes and some fresh strikes. One-third the required number of warheads should be adequate as reserves. Hence, the requirement works out to 200 nuclear warheads for minimum deterrence doctrine with a no first use strategy if 10 major population and industrial centres are to be attacked in a retaliatory strike to achieve a 70 to 80 per cent

assurance level of destruction. Taking into account the requirement and the likely availability of nuclear warheads (production of fissile material, machining and partial assembly) and delivery systems (development and serial production of missiles and SSBMs), it would be advisable to raise India's nuclear force in a phased manner over a period of two to three decades. Midcourse corrections can be applied based on the availability of new technologies and developments in the diplomatic and disarmament fields. In the nuclear era, strategy has never been the sole determinant of force architecture. The techno-

logy trajectory will continue to

drive nuclear force structures that should therefore be flexible and adaptable.

Since India's targeting philosophy is not premised on "pro-portionate deterrence" or "flexible response", India does not need tactical or battlefield nuclear weapons. Tactical nuclear weapons are essentially weapons of warfighting and their availability on the battlefield is likely to lower the For 10 counter value targets nuclear threshold and create a in the adversary country, a proclivity to use them early during adverse military situations. Also, the inherent disad-

vantages of tactical nuclear weapons primarily, lower threshold of use, the need for "launch on warning" and "launch through attack" strategies, complex command and control and surveillance challenges, increased cost of manufacture and maintenance, the problems of storage, transportation and handling in the field and the greater risk accidental and

should preclude the use of these weapons for deterrence.

India's nuclear weapons should continue to be under firm civilian control. A National Command Authority headed by the Prime Minister should be established for the command and control of India's nuclear weapons.

COMMAND

A clear chain of political and military succession should be laid down. Immediate steps should be taken for the establishment of an underground national command post and an the enemy's first strike on alternate national command post for the higher direction of war during emergencies. The armed forces should be brought into the nuclear decisionmaking loop. The responsibility for the planning, coordination, bile missiles, approximately 50 targeting, development and peacetime management of India's nuclear weapons and that may be destroyed in a first of executing a nuclear strike if deterrence fails, should be that of the armed forces.

A new post of the chief of defence staff (CDS - a new overall Commander-in-Chief) should be created to provide 'single point military advice" to the government. He should be assisted by a tri-service joint planning staff for threat assessment and the formulation and execution of a joint military strategy, including nuclear strategy. A tri-service strategic forces command should be raised under the CDS to exercise functional control over the nuclear weapons and to oversee the functioning of the surveillance, early warning, nuclear forces intelligence, targeting, attack and damage assessment systems.

The cost of raising a nuclear force comprising $20\bar{0}$ warheads would amount to approximately Rs 47,000 crores at current rupee value. This expenditure, to be incurred over a period of three decades, would amount to less than 0.07 per cent of India's present GDP annually.

Since India's GDP is growing at the compounded annual rate of approximately seven per cent, it clearly emerges that the expenditure likely to be incurred on maintaining a credible minimum deterrent comprising 200 nuclear warheads is eminently affordable. With the defence budget proposed to be gradually increased to three per cent of the GDP, it would be possible for the expenditure on the nuclear force structure to be incurred from within the defence budget without any additional allocations.