

# India has fusion, fission bombs: Abdul Kalam

By Our Special Correspondent

**NEW DELHI, NOV. 12.** Declaring that India possesses both fusion and fission nuclear bombs, Dr. A.P.J. Abdul Kalam, renowned scientist, said today that these weapons were for deployment. "Every weapon is made for deployment, not for storage," he said addressing a press conference after demitting office as the Principal Scientific Adviser to the Government.

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Asked whether the country had the command and control system in place for nuclear weapons, he declined to give details on the ground that it was for the authorities to be concerned about. At the same time, he emphasised that as far as safety aspects of these weapons were concerned these were "well-positioned and well-placed".

Asked to elaborate on claims that India had hydrogen bombs, Dr. Kalam recalled the Prime

Minister, Mr. A.B. Vajpayee's statement that the country had both fusion and fission bombs. Other countries might not accept it, but India possessed the hydrogen bomb technology. It was clear that the country had carried out the required tests at Pokhran. "We are satisfied with that," he said. Stating that his unfulfilled dream was the country become self-reliant in critical technology, Dr. Kalam said the country's prestigious armament programmes such as the development of short and long range missile systems as well as development of a light combat aircraft were on course.

He emphasised that he was demitting office on his own so that he could spend more time with young students.

The focus, he said, should be to stem the increasing disinterest among youngsters for a career in science and to create a passion in them for science.

THE HINDU

13 NOV 2001

# Nuclear India plays responsible

FROM SUJAN DUTTA

**New Delhi, June 3:** Fears that the world community led by the US will increasingly brand India a nation incapable of handling its nuclear status, has forced the Centre to not only come out with repeated clarifications but also state that it assumed Pakistan, too, is responsible on this score.

"Government makes it clear that India does not believe in the use of nuclear weapons. Neither does it visualise that it will be used by any other country," said a statement issued by the Union defence ministry today.

Defence minister George Fernandes, in an interview to the *International Herald Tribune*, said: "I don't agree with the idea that India and Pakistan are so imprudent and excitable that they'll forget what nuclear weapons can do."

"I think it should be accepted that in south Asia there are responsible leaders. They may be

belligerent and not fulfil their promises. But on nuclear matters, the subcontinent is alive to the implications... if the western powers and China know how to keep their nuclear capabilities under control, the same holds good for India, Pakistan," he said.

But Pakistan's frequent branding of nuclear capable missiles and repeated threats from its establishment to use the nuclear option can gradually redefine the Indian military doctrine of a "limited, conventional war".

Highly-placed official sources said in their talks with India at difference levels, US officials had repeatedly asked for Delhi's perception of Islamabad's nuclear threshold and whether a war can actually be fought under the nuclear shadow.

Since the 1998 nuclear tests by India and Pakistan raised serious fears of a nuclear holocaust in the subcontinent, both Islamabad and New Delhi have

consistently maintained that their command and control structures are in responsible hands.

Fernandes expounded in a seminar at the Institute of Defence Studies and Analysis in New Delhi early last year that despite the nuclear shadow, a "limited, conventional war" was actually possible. The doctrine came to be adopted by the security establishment in India and was further buttressed by the Kargil operations. Operation Vijay in 1999 was a war made possible despite both countries going nuclear. But the fundamental difference between the Kargil war and a possible military conflict now is that India was evicting intruders from within its own territory and had firmly decided not to cross the Line of Control.

This time, though, the very threat of striking at militant bases and the unprecedented military deployment has made

Pakistan raise the nuclear threat. Though General Pervez Musharraf has not talked about it, associates close to him in the government and even Pakistan's new ambassador to the UN have talked of using the nuclear option in the event of an Indian strike. This has raised fears so high that US think-tanks are now regularly putting out information on what the cost of a nuclear conflagration in the subcontinent might be. In repeated interactions with Indian officials, US officials have also tried to determine New Delhi's perception on what Islamabad's nuclear threshold — meaning, the point at which Pakistan might use a nuclear weapon if a conflict breaks out — might be.

Sources in the security establishment say that in the current military standoff, Pakistan has deployed its nuclear-capable missiles. But whether its nuclear warheads have been "coupled" with the missiles is a matter of

conjecture. "We take the question of Pakistan's nuclear threshold seriously," one top official said.

In different wargamed scenarios, Pakistan — which rejects the policy of "no first strike" — can be projected to use a tactical (small) nuclear weapon on attacking troops if it is afraid of losing crucial ground, or on narrow tracts to sever large chunks of territory from the mainland.

Indian military officials and security leaders refuse to speculate aloud on nuclear scenarios, and say the very airing of such views in public is a sign of irresponsibility.

In January this year, even after army chief General S. Panabhan made clear the Indian policy to only retaliate, Fernandes thought it fit to issue a clarification only to drive home the point more forcefully.

India is expected to set up its strategic (read nuclear) forces command by end-June.

# India's nuclear balance sheet

By V.R. Raghavan

*Nuclear weapons have already proved incapable of conferring great power status on India.*

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**F**our years after the nuclear tests of 1998 is a good time to assess India's stock as a regional and global strategic player. Great power status and consolidation of India's claims to it were claimed to be the primary aim of the tests. (The 'resurgence of India', which the tests were supposed to herald, seems today some long distance away. In fact, the mood at present is one of despair within and disquiet outside the country, on the prospects of its political stability, economic buoyancy and strategic reliability. India's military is in its battle stations against Pakistan.) The Government at the Centre is reduced to retaining power through political deals, which both defy ideological ideals and violate electoral promises to the people. The follow-up required on achieving the stability of nuclear deterrence is missing. (Nuclear deterrence seems to have failed both the country and its leadership in making the nation more secure.) It would be appropriate to posit that the political leadership which obtained nuclear weapons has not yet understood their essential meaning.

The nuclear reality in South Asia is one of loss of direction after the big bangs of May 1998. India has done no more than raise a few Prithvi regiments for the Army and Air Force. The Agni tests have evoked hardly a ripple in and outside the country. They are soon to be inducted in the defence services. Doubts nevertheless continue to be expressed by scientists in and outside India about its capacity to miniaturise the nuclear warheads adequately to mate with existing missile delivery systems. The Government is unwilling to set these doubts at rest. The first principle of deterrence stability, that of leaving no doubts in the adversary's mind on one's capability, is thus being disregarded. The nuclear doctrine of the nation hangs in limbo, with neither its authors nor the Government claiming it to be official, legitimate or authoritative. There is no known nuclear command authority; the chain

of command is unclear to both friends and adversaries. There is no nuclear risk reduction dialogue among the Indian, Chinese and Pakistani Governments.

The Chief of the Defence Staff who is expected to put some order into the loose and ambiguous nuclear command and doctrine system in India is nowhere in sight. An Integrated Defence Staff has been created, in which there is going to be a three star ranking officer in charge of the strategic forces. He is to work under another three star ranking officer who currently heads the integrated set-up. The latter is himself under the Chiefs of Staff Committee, which has no authority to integrate the nuclear infrastructure comprising nuclear scientists and intelligence agencies. The nuclear command, control and intelligence authority is therefore neither convincing, nor confuted of its shortcomings by the Government. Nuclear weapons have thus become part of the general drift and doubt in national governance.

In Pakistan, the doubtful advantage of nuclear weapons remaining in the hands of the military has been seen to be a chimera. The threat of nuclear warheads getting into extremist hands has apparently increased. Testimony by U.S. intelligence agencies have confirmed this risk. Pervez Musharraf's speech on January 12 confirmed that his nuclear weapons had made him hostage, rather than giving him any room for manoeuvre against U.S. demands to comply with its Afghan policy. Now and then Islamabad feels impelled to refer to a nuclear response, if India crosses the undefined Rubicon of Pakistan's vital interests. Nuclear deterrence in its technological, military, arms race and political dimensions is thus unstable in India and Pakistan. The situation is made no less dangerous by continuing Chinese nuclear and mis-

sile assistance to Pakistan.

The global nuclear circumstance has changed dramatically since the tests of 1998. In no small measure, India's tests also contributed to that change. They put paid to the aspirations of the nuclear powers to retain their monopoly over the nuclear deterrent. India's tests effectively laid to rest the NPT as an instrument of nuclear denial. They also confirmed that sanctions against nuclear proliferation do not deter those determined to face up to them. The CTBT had already been put to perpetual sleep by the inability of the U.S. to ratify it. The Indian tests reconfirmed the fears in many circles that the nuclear powers are each on their own. Russia's economic difficulties and the run down of its nuclear capability have also left the U.S. in a dominant and unchallenged nuclear position.

The U.S.' preference for unilateral action on nuclear and missile policies was in the making even before the Indian tests. It was nevertheless given a sharper edge by the tests. The U.S. decisions to speed up its missile defence programmes, its decisions to pull out from the ABM Treaty, and its counter-proliferation emphasis, now provide the framework of its strategic priorities. It is not as if no successes were gained by the BJP-led Government which went in for the tests. The tests moved India from being a covert nuclear weapons possessor to an overt one. It certainly made the major powers take note of the new boy on the block. Indian skills in restoring global confidence in its rational and responsible strategic policies were commendable. Its image as an economic and political power in the making was carefully crafted. These initiatives laid the groundwork for a new set of strategic relationships with major powers. In other words, the repositioning of India in the post-Cold War era had been skilfully

begun.

There are, however, serious doubts about the political leadership's awareness of the constraints nuclear weapons place on policy. The first one relates to waging a military campaign. The risks of such action when nuclear weapons are on the scene are not reduced by terming it a limited war.

Nuclear weapons' use can never be unilateral in view of its global consequences. Seeking a war in the belief that use of nuclear weapons can be isolated from it shows a lack of understanding of the escalatory dynamic built into military campaigns. That Pakistan's leadership could think of Kargil as a feasible military option without a nuclear risk demonstrated a dangerous propensity to risk taking. The Indian leadership's belief in war being an option and its discounting of the nuclear dangers is equally risk prone.

The arrival of nuclear weapons in India and Pakistan should lead to new thought on resolving their antagonisms. The key issue of Jammu and Kashmir has led to the current military deployment for war. It would continue to keep the risks of a conflict at high levels in future. War was never a viable option for Pakistan against India. Now that there are nuclear weapons on the scene, war is not a viable option for India either. Equally, terrorism is not an option for Pakistan to obtain an advantageous outcome of the Jammu and Kashmir issue if it wishes to ensure that a war does not take place. The resolution of the Jammu and Kashmir issue will, therefore, have to come from options that preclude a military solution. In the absence of that mutually agreed belief, nuclear weapons will continue to threaten instead of ensuring the security of the two nations.

Nuclear weapons have already proved incapable of conferring great power status on India. If not handled carefully, they will continue to bedevil its strategic equations within and beyond the South Asian region.

# Nuclear power sector to seek more investments

By R.K. Radhakrishnan

**KAIGA (KARNATAKA), APRIL 2.** Moves to amend the Atomic Energy Act "suitably" to bring in "additional investments" in the nuclear power sector are "currently in progress," the Atomic Energy Commission (AEC) Chairman, Anil Kakodkar, has said.

"The additional investment in the nuclear power sector could be from abroad, could be from the private sector. The Atomic Energy Act at this point had a particular framework" and this needed some "adjustment," he said. The adjustment had "to be reflected through a suitable amendment and that work is currently in progress."

The investment had to be in the form of equity in some form but it could take different forms, Mr. Kakodkar added, elaborating on the nature of the investment the Commission and the Nuclear Power Corporation (NPC) was thinking of. But the AEC was not talking about a complete change in the existing modes of operation. "The existing modes continue. Everything we want to do we want to do additionally," he said and added that if a company was attractive enough there would be no

dearth of investors. "The market in India is so large. And I don't see any sign of any saturation for several decades," he added.

The NPC chairman and managing director, V.K. Chaturvedi, was blunt: The need to meet the goal of generating 20,000 MWe from nuclear power plants by 2020 meant that the NPC needed some flexibility. "Today it is a very rigid framework." The company was unable to capitalise on its goodwill in the market. "The Government is committed to give us, on a reduced basis, budgetary support, only up to the eleventh plan. Our own resources plus borrowings will be enough to support an addition of 3,000 MWe per annum. That is the situation now," he said. But if the capacity addition had to be increased at a quicker rate, then finance had to be raised from outside.

Mr. Chaturvedi hastened to add that strategic materials would still remain within the control of the Central Government. "The world over, nuclear material is always controlled. So will be the case in India, as part of the national policy. Bringing in the private sector does not mean that you don't worry about these materials," Dr. Ka-

kodkar said.

On the question of adding to the proposed capacity at Koodankulam with Russian help, the AEC chairman said there was "nothing like open arms" when it came to business deals. In principle, Koodankulam would have more plants, he added. But "it has to be an attractive business proposition."

The Koodankulam site can accommodate six units. "If anybody, including Russia, gives a proposal which is beneficial to us, we will certainly consider it. Otherwise, we have our own programme... a very strong programme. We can put up four indigenous 700 MWe units there," Mr. Chaturvedi said.

Responding, the Russian Deputy Prime Minister for Atomic Energy, E.A. Reshetnikov, said that in every meeting the two sides were discussing possibilities of setting up more units at Koodankulam. "I understand that it is not the best possible scenario for India to have the new technology only in two units. It is not beneficial to India."

"Our President, Vladimir Putin, is visiting India later this year. The question will be solved at that time," he said through an interpreter.

# NUCLEAR POSTURE

Will India Opt For A Recessed Deterrent Or Ready Arsenal?

By GURMEET KANWAL

After India's Pokhran II nuclear tests in May 1998, a surfeit of books intending to explore, understand and explain the country's nuclear policy and doctrine hit the stands in quick succession. The more notable ones are Raj Chengappa's *Weapons of Peace*, Raja Menon's *A Nuclear Strategy for India* and George Perkovich's *India's Nuclear Bomb*. The newest book in this genre is *India's Emerging Nuclear Posture* (Santa Monica, California, 2001) by Ashley Tellis, now the security advisor to the United States ambassador at New Delhi. Dr Tellis' critically researched analysis presents an insightful assessment of India's emerging nuclear posture in the light of India's national security strategy, organisational structures for nuclear command and control and technological capabilities.

Most Indian observers of the strategic scene believe that the 1998 Pokhran explosions catapulted India to world power status as a nuclear weapons state. Only a few perceptive analysts realise that testing nuclear warheads is less than half the story. Having demonstrated a technological capability, India has to decide on the nature and type of nuclear deterrence that it wishes to institute and take a series of inter-related actions to put its "minimum credible deterrent" into place. Tellis has looked closely at the options available to India's political leadership and has put forward his own hypothesis regarding India's most likely course of action.

## Competition

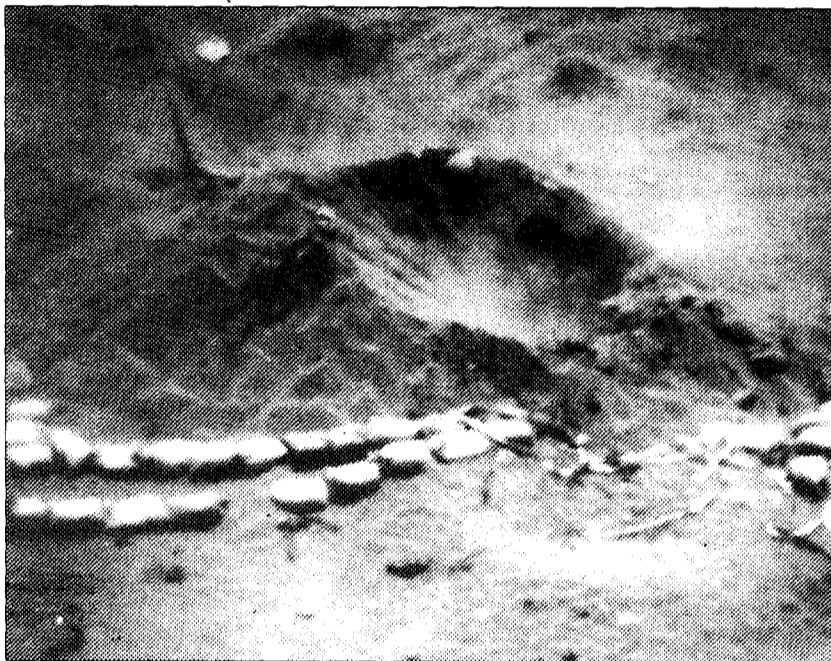
As an emerging nuclear power, India is locked in a triangular security competition with China and Pakistan. Tellis examines the persistent claim of prominent Indian strategic theorists that India will adopt an indigenous nuclear doctrine that seeks to avoid the pitfalls of the dominant strategic solutions incarnated during the Cold War and whether it would be reasonable to suggest that India would develop its own indigenous approach to nuclear strategy and, consequently, end up with a force posture that actually exemplifies its stated commitment to developing only a minimum credible nuclear deterrent.

Tellis argues that India's emerging nuclear doctrine is "fundamentally conservative in orientation and exemplifies a systematic internationalisation of the lessons of the nuclear revolution". He judges this doctrine to be appropriate for India's strategic circumstances in South Asia and India's leaning towards a status quo course. India's nuclear weapons, he writes, "are primarily pure deterrents intended to ward off political blackmail that might be mounted by local adversaries in some remote circumstances,

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while simultaneously providing strategic reassurance to India's political leaders if the country were to face truly dire threats to its security". He explains that India's retaliatory nuclear strike "is likely to be slow but sure in coming, with the absence of alacrity here being entirely a function of India's desire to simultaneously: maintain its traditionally strict system of civilian control over all strategic assets; minimise the costs of maintaining a

According to Ashley Tellis, proponents of alternative (4) argue that a "recessed deterrent", which would allow India to constitute a nuclear arsenal within a few months, ought to suffice for Indian security, especially if New Delhi can utilise the threat to overtly deploy nuclear weapons as leverage to both accelerate the pace of global nuclear arms reductions and secure preferential economic and political gains for India.



nuclear deterrent at high levels of operational readiness routinely; and maximise the survivability of its relatively modest nuclear assets by an operational posture that emphasises extensive, but opaque, distribution of its many constituent components".

Tellis is of the view that the 1998 tests only reopened the strategic debate within India and once again focused attention on the five choices that the country has debated for long: (1) renounce the nuclear option; (2) maintain a South Asian nuclear free zone; (3) persist with simply maintaining the nuclear option; (4) acquire a "recessed deterrent"; and, finally, (5) develop a robust and ready arsenal immediately.

## Alternatives

The first two alternatives were supported by the international community after the Pokhran tests of May 1998. However, Indian policy makers and analysts focused mainly on the last three alternatives, sending a clear signal to the world that denuclearisation was no longer an option. A few analysts did continue to insist that India should not acquire a nuclear force for both moral and strategic reasons, despite having proved its technological capability. However, they were heavily outnumbered.

Those supporting alternative (5) express the view that India has already crossed the Rubicon by resuming nuclear testing and, consequently, should not halt its nuclearisation until it acquires a large, diverse, and ready nuclear arsenal that will bequeath New Delhi both security and status vis-a-vis the most important entities in the international system.

Ashley Tellis has deduced that the Indian government has chosen to adopt a nuclear posture somewhere between alternatives (3) and (4). "The Indian nuclear force will be configured neither as a recessed deterrent nor as a ready arsenal but as a force-in-being — that is, a deterrent consisting of available, but dispersed, components that are constituted into a usable weapon system primarily during a supreme emergency. The force-in-being will thus routinely consist of unassembled nuclear warheads... under civilian control, while the delivery systems will be maintained without their nuclear payloads by the military either on low alert or in storage away from operational areas... or at their standard levels of readiness... The size, location, and status of this force writ large will be highly opaque along multiple dimensions, and it will be masked by extensive deception and denial operations in order to increase its survivability against any

threats that may be mounted by India's adversaries".

Tellis attributes this compromise choice to acquire a nuclear deterrent configured as a force-in-being, rather than as a robust and ready arsenal, to the strategic advantages that accrue to India. He feels that the presence of nuclear weapons in some form will suffice to prevent blatant blackmail by China and Pakistan. The force-in-being "bequeaths New Delhi with diplomatic benefits as it exemplifies 'restraint', particularly in comparison with an overt arsenal, and — in so doing — holds the promise of attenuating US non-proliferation pressure on India.

It offers psycho-political reassurance as it bolsters the confidence of India's national leadership, enhances their resolve in crises, with local adversaries, and simultaneously provides the country with status as a nuclear weapons power. It buttresses existing domestic political structures by enabling India's civilian security managers to institutionally exclude the military from the day-to-day control and custody over the most critical components of India's strategic capability. And, finally, it portends budgetary relief as the relatively quiescent force posture represented by a force-in-being avoids all the high costs usually associated with the procurement, deployment, and operational of a ready arsenal."

## Safeguards

While the arguments favouring an Indian nuclear posture between a recessed deterrent and a ready arsenal are no doubt compelling, the continued testing of Agni IRBMs and media reports regarding the imminent raising of an Agni missile regiment point more to an Indian move towards a small ready arsenal, but one with adequate safety and security safeguards built in. Even for strategic reasons it would be logical for India to constitute a visible nuclear force as such a step would enhance the quality of its deterrence by aiding credibility and eventually force India's nuclear adversaries to negotiate mutual confidence building and risk reduction measures vis-a-vis an ambiguous recessed deterrent.

In his magnum opus of over 900 pages, Tellis has painstakingly and methodically covered a great deal of ground, most of it new and, therefore, even more stimulating. He has assessed the logic and structure of the evolving force-in-being and concluded that it would be limited in size, separated in disposition and centralised in control.

He has analysed the availability of fissile material to India, the country's technological capability to produce nuclear warheads and delivery systems, the supporting infrastructure that it has not the procedural systems that it has instituted. The book should be essential reading for the country's policy makers, the national security establishment, strategic analysts and academics.

THE STATESMAN

20 MAR 2002

# Panel criticises slow growth in nuclear power sector

Times News Network

NEW DELHI: The country should update its nuclear power stations and go in for mega atomic energy generation projects to generate more energy at a cheaper rate, recommended a parliamentary committee on energy recently.

The committee said the growth of the nuclear power sector had not been encouraging so far. It constitutes only three per cent of the total power generation. Plans up to the year 2020, assuming that a sum of Rs 1,11,941 crore is optimally utilised, would add up to only seven per cent.

Thus, it may not be possible for India to catch up with countries like France, Lithuania, Belgium,

Slovak Republic, Ukraine, Bulgaria and South Korea, which have 76, 73, 56, 53, 47, 45, and 40 per cent share of nuclear energy respectively.

In terms of the average net nuclear capacity, even countries like Brazil, China and Pakistan, whose nuclear power share in the total electricity generation is less than that of India, performed better, the committee has observed.

The committee has attributed the tardy growth in the nuclear power sector to the time taken for development of indigenous technology. However, it appreciated that the import contents in a pressurised heavy water reactor (PHWR) is only about 10 per cent.

Stating that the lack of financial

resources also contributed in retarding the growth of nuclear power in the country, the committee suggested that the government continue to extend adequate budgetary support for the programme.

The country has six operating nuclear power stations with 14 units. With an installed capacity of 2503 MWE, the average net capacity comes to about 179 MWE, the report said.

Although begun in the 1960s, the nuclear power programme has been slow. It never touched 1,000 MWE capacity during any of the earlier decades. By comparison, the average net nuclear capacity of countries like France, Lithuania, Belgium, is over 1,000 MWE, even countries like Brazil, China and

Pakistan have an average net nuclear capacity of 927, 722, and 212 MWE, the report said.

The committee said that as per the plan drawn by department of atomic energy (DAE), the capacity of nuclear power stations may go up to 9,935 MWE by 2012 at the end of the 11th plan.

The committee headed by Sontosh Mohun Dev has commended the work of the Nuclear Power Corporation of India. It has commended the work of the Department of Atomic Energy as well, noting that the collaboration with Russia on the much-delayed Advanced Light Water Reactor Project at Kudankulam underscores the department's satisfactory track record.

THE TIMES OF INDIA

11 MAR 2002

# Do not test our patience, Pak warns India against Agni firing

ISLAMABAD (Pakistan may have second thoughts and follow suit to test its Shaheen-II and other missiles in response to India's test-firing of Agni-II, if the condemnation of the international community against the Indian test was not up to its expectations.)

(Pakistan might test one of its Shaheen-II missiles or take advantage of India's test and begin a series of tests for its Ghauri, Shaheen and Hataf missiles, media reports here said on Sunday.)

(Pakistan's defence spokesman Maj Gen Rashid Qureshi claimed that Pakistan's deterrence was fully in its place and said Islamabad also reserved the right to conduct the tests of its missiles.) A report in the local daily *Jang*, quoting sources, said that Pakistan might test Shaheen-II, if the international community did not take strong notice of Agni-II test-firing.

Judging from the response of the international community, barring expression of regret by countries like Britain for the timing of the Agni-II test, the international reaction appeared to be not so adverse as expected by Pakistan. Another newspaper, *Pakistan Observer* said on Friday that Pakistan initially decided not to test Shaheen-II for fear of exposing its secret locations of missiles due to the presence of U.S. troops in Pakistan airbases.

President Pervez Musharraf called an emergency meeting of his military and civilian colleagues imme-

diately to discuss the response. Other reports suggested that those consulted by Gen Musharraf included Abdul Qdeer Khan, considered as father of Pakistan's nuclear bomb. Mr Khan retired last year and made adviser to Gen Musharraf.

It said initially Pakistan has decided not to be provoked by the Indian missile testing and wait to see the international reaction. But if the international community continued maintaining mysterious silence, it might go ahead and conduct missile test, the newspaper said. Shaheen-II has an expected range of 2,500 km. *Nawai Waqt* said the test firing of Agni has paved the way for Pakistan to conduct more missile tests.

Pakistan is said to be ready to conduct test of its ballistic missiles, which have been pending for a long time, it said. According to the report, under the Hataf series Pakistan had produced Ghauri, Shaheen and Hataf-I but, because of intense pressure, it had to confine itself only to conducting two tests each of the Ghauri and Shaheen and one of Hataf-I.

Following the Indian test, Pakistan has indicated that it might resume testing of various versions of its missile system, it said. Pakistan has already tested affective reach of short-range Hyder-I missile, but its first test-flight is to be conducted. Institutions working on missiles have also been pressing the government to give permission to conduct more missile tests, it said. (PTI)

THE TIMES OF INDIA

28 JAN 2002

## China appeals for peace after Agni test

**BEIJING, JAN. 26.** China today appealed for peace and stability in south Asia but stopped short of condemning India's surprise test of a nuclear-capable missile.

"We hope all the countries will take more measures favourable to the protection of peace and stability in south Asia," a Foreign Ministry spokesman said.

### **Negative signal: EU**

In Madrid, the Spanish EU Presidency said India's test-firing of the short-range nuclear-capable missile sends a "negative signal" to south Asia and the entire world. *J. N. S. P. M. M.*

"Given the high degree of tension that exists currently in the region, the European Union considers that the test of a ballistic missile... risks sending a negative signal to the region and to the entire international community at a moment when it is extremely important to exercise restraint," Spain said in a statement. The EU — Spain holds its rotating Presidency — said it remained pre-occupied with the existing tension between Pakistan and India, and hoped that Islamabad and New Delhi were capable of finding a peaceful solution. — AFP

THE HINDU

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## MAJOR BOOST TO N-MISSILE ARSENAL

# Short-range Agni test-fired

By Atul Aneja and Sandeep Dikshit

NEW DELHI, JAN 25. In a demonstration of its military capability, India today tested a new, shorter variant of the Agni nuclear missile, but said the launch was not intended against any country.

"This (the test) is not directed against any country. This is part of technological evolution of our missile programme and its timing was determined solely by technical factors," Nirupama Rao, spokesperson of the Ministry of External Affairs, said.

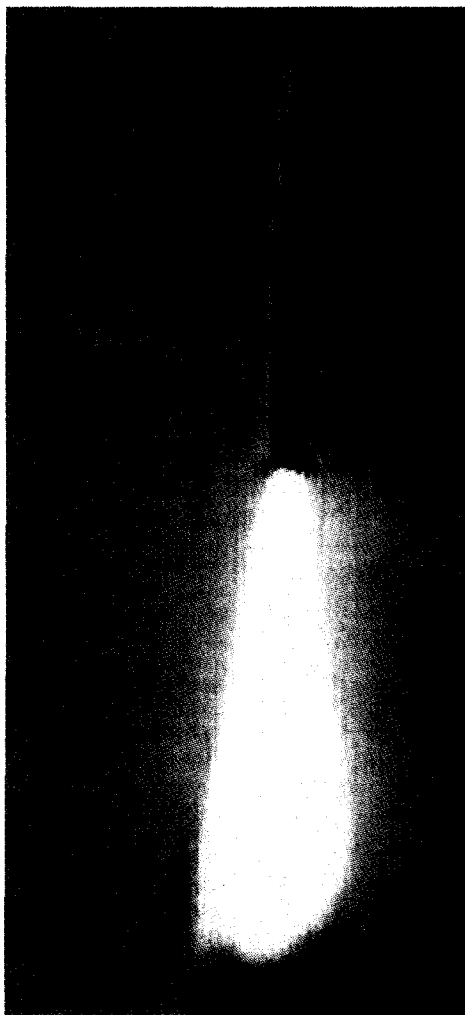
(The missile tested today has a range of 700 km and is a variant of Agni-I) she said. Government sources said the missile used a solid fuel as propellant and was based on a single-stage rocket. The use of a solid propellant is significant as missiles based on it can be more easily used as weapons. (Consequently, solid fuel missiles, including Agni-III that was tested last year, enhance the credibility of India's nuclear deterrent.)

Signalling that the missile tested today could carry nuclear warheads, Ms. Rao said the launch was part of India's effort to indigenise and "guarantee credible nuclear deterrence". The variant, as in the case of other missiles in the Agni family, can carry a one tonne warhead.

### President lauds scientists

The President, K.R. Narayanan, congratulated the scientists and those associated with the launch, saying, "The outstanding achievement of our scientists, as represented by this success, will go a long way in ensuring self-reliance and indigenisation of our defence production capacity."

(The Prime Minister, Atal Behari Vajpayee, termed the launch as a part of "several steps" that were being taken to strengthen national security. Agni was an on-going project and the decision to test it in various configurations had been taken earlier. Welcoming the launch, the Home Minister, L.K. Advani, said it



A TV picture shows the Agni missile blast off during test firing off the coast of Orissa on Friday.

had been postponed twice in the recent past. Reiterating India's intent to include ballistic

missiles in its military arsenal, the Defence Minister, George Fernandes, said the test enhanced India's capability in "deployment" of such surface-to-surface missile systems.

With the successful testing of the 700 km-range missile, India is now in a position to fill key gaps in its missile arsenal. (The new missile will bridge the gap between the 350 km-range Prithvi and the 2,000 km-range Agni-II missile — the two weapon systems that are now undergoing "serial production".)

The armed forces as of now have a range of weapons to wage battle from a distance. These include artillery guns that have a reach of around 40 km, the recently-acquired Russian-built Smerch multi-barrel rocket system that can target up to a distance of 120 km and the Prithvi missiles that can be used flexibly for landing conventional warheads within a range of 150 to 350 km.

Apart from these missiles, India is acquiring from Russia the ship-based Klub cruise missiles, which have a maximum reach of around 500 km. India and Russia are also developing the 'Brahmos' cruise missile, which has a range of 280 km., official sources said. Besides, India reportedly is also developing a submarine-based ballistic missile and is likely to test its launcher shortly.

(Analysts said that notwithstanding the official view, today's test could not be seen outside the South Asian ambit involving Pakistan and China — two neighbouring countries that have impressive missile capabilities of their own.)

Pakistan, for instance, has tested the variants of the North Korean Nodong series of missiles, including the 1,100 km-range Ghauri that it last tested in April 1999. Besides, it has launched the 700 km-range Shaheen, a variant of the Chinese M-9, and displayed the 2500 km.-range Shaheen-II last year. China, on its part, recently carried out two tests of an intercontinental ballistic missile (ICBM) as well as experimented with its submarine-based Julong II.

## Missile test was delayed to avoid escalation

By C. Raja Mohan

NEW DELHI, JAN. 25. Today's test-firing of the short range Agni missile, a variant of Agni I, is part of a programme to develop a new missile system and is not aimed at increasing the current military pressure on Pakistan, highly-placed sources in the Government say.

The testing of the missile system, originally scheduled for mid-December, was postponed after the attack on Parliament House last month, the sources add. As India mobilised its military forces

against Pakistan and launched a diplomatic offensive after December 13, the Government took a conscious decision to postpone the test to the third week of January. A missile test in December would only have added to the rising military temperature between India and Pakistan. The Government decided it was prudent to delay it than go ahead with the original schedule.

The test had to be postponed a second time for diplomatic reasons — the arrival of the U.S. Secretary of State, Colin Powell, and

the Chinese Premier, Zhu Rongji, in the third week of January in the capital. To avoid any misperception in Islamabad that the test was part of the current Indian military pressure on Pakistan, the Government had informed the Pakistan High Commission here about it earlier this week. The sources say it is part of an effort to maintain transparency in missile testing and is in consonance with the spirit of the agreements signed during the Prime Minister, Atal Behari Vajpayee's visit to Lahore in February 1999. In a Memorandum of Understanding signed at

Lahore, India and Pakistan had agreed to negotiate a number of confidence-building measures in the nuclear and conventional military arena. One of the proposed agreements was on prior notification of missile testing and not to direct missiles in each other's direction.

India had also informed the five permanent members of the U.N. Security Council — the U.S., Russia, China, France and Britain. Among the others taken into confidence were Japan, Germany and the European Union.

THE HINDU

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# PMO told Fernandes to issue clarification <sup>13/1</sup>

STATESMAN NEWS SERVICE

NEW DELHI, Jan. 12. — The Union defence minister issued a clarification about India's stand on the use of nuclear weapons after calls came from the Prime Minister's Office.

A PMO spokesman said Mr George Fernandes' remarks were a part of a "government statement" and it did not really matter who in the government articulated it.

According to defence ministry officials, the Army chief, General S Padmanabhan's statements on India's nuclear weapons and their possible use, though absolutely accurate, were considered "too strong" in view of the current diplomatic situation.

A senior official said the statements came even as the home minister, Mr LK Advani, was in Washington. The general perception was that Gen Padmanabhan had

<sup>S. M. E. P. M. S. P. 1</sup>  
said far too much — several hundred words — about the nuclear issue.

The defence minister is



**Mr George Fernandes**

expected to visit the USA very shortly while the US secretary of state, General Colin Powell, is expected to arrive here in a week.

The clear-the-air effort by Mr Fernandes may have caused some embarrassment to the military, but to

ease matters his statement was shown to General Padmanabhan — who is also the chairman, chiefs of staff committee — before it was released.

Though there were rumours of General Padmanabhan's resignation, sources denied there was such a possibility.

The Army chief had said that in case Pakistan used nuclear weapons against any Indian military targets, its continuation as a nation would be in doubt. India was ready for a second strike and there was a "sufficiency of nuclear weapons."

He had stated that India did not believe in a first use.

Mr Fernandes only added to that statement saying the country's nuclear doctrine was categoric and there was no possibility of a first-use. India would retaliate with nuclear weapons only in case of a nuclear attack.