SHRI DINESH SINGH : The Maladives are a sovereign country and hey are guided by their own national interests. How can I say what is the dominant force? They have very friendly relations with the United Kingdom.

### CHINESE NUCLEAR TECHNOLOGY

•93. SHRI KRISHAN KANT : Will the PRIME MINISTER be pleased to state whether the Department of Atomic Energy keep a close watch over the Chinese advances in the field of Nuclear Technology?

THE DEPUTY MINISTER (SHRIMATI NANDINI SATPATHY) : The Department of Atomic Energy makes every effort to keep abreast of advances in Nuclear Technology in various countries of the world including China.

SHRI KRISHAN KANT : May I know from the Government what is their assessment and information about the advance of nuclear technology in China? Will the Government be able to give us and this House a certain sessment, besides what they have t? May I know if they have got formation regarding the rate of production of fissile material and whether they are fissile material by any producing sophisticated process like ultra-scientific methods and whether they have developed the transport capacity, like heavy bombers, for hydrogen bombs and what is the stage of sophistication which they have reached in their electronics and communications industry because on that depends much of the strength of their nuclear technology?

### SHRIMATI NANDINI SATPA-

THY : About the fissile material we do not have any information a; to what China has got. The othei question he has put is about then centrifuge method. This method ii being developed only in Europe anc probably in no other country. Then Sir, the hon. Member has asket what progress China has made. Fo that I would like the hon. Membe

to refer to the question answered by the Defence Minister wherein he has said that China can produce about 40 nuclear bombs of 20 kilo-tons capacity every year and can be expected to have already stockniled about 100 to 120 bombs of this capacity. It was also stated by the Defence Minister that China was laying emphasis large-scale on production of medium range ballistic missiles with nuclear warheads and that conthe pace of China's sidering nuclear development so far, China's first deployment of a limited number of medium range missiles mav not be far away. About other information, China has not yet succeeded in perfecting the missile delivery system, both in the intermediate and intercontinental ranges, though the latest nuclear test held on 27 th December, 1968 may have marked an advance. This test was the first successful nuclear test after the reportedly abortive test of December, 1967 It involved a thermo-nuclear device of 3.1 megaton yield and was probably dropped from an aircraft. There arc reports that China is also devoting some attention to production of "G" class submarines which can be later fitted with missile launching pads capable of firing missiles to a distance of about 400 miles.

SHRI KRISHAN KANT ; May I know from the Government whether they have analysed as to which of the Indian cities will come within the range of a medium-range ballistic missile? No. 1. No. 2, may I know whether they have got any cell wherein continuous data collection about China's advance in nuclear technology is being done either by the Department of Atomic Energy or by the Ministry of Defence?

SHRIMATI INDIRA GANDHI: Sir, I do not think that we should furnish information about our cities to the Chinese. As far as the detection is concerned, we have a very sophisticated seismic detonation range which was set up in 1965 in colla-I boration with the United Kingdom.

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Small movements of the earth which are set oil" by underground explosions and which go to great distances through the interior of the earth are detected by seismography and with the aid of suitable analytical technique. The signals are collected by a network and they provide fairly precise estimates of the yield and location f such explosions.

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The network is operated round the clock to ensure its effectiveness as a monitoring facility. Then there are atmospheric explosions which generate airwaves which travel over long distances with features characteristic of their yields and heights of detonation. There are microbarographs which sense small fluctuations of the atmospheric pressure which enables such waves to be detected. We have such stations at several locations in India. We also have 11 air monitoring stations which carry out fallout studies.

SHRIMATI LALITHA (RAJAGOi'ALAN) : Just now the Deputy Minister stated about the progress that has been made by China in nuclear weapons. I have a newsitem with me dated February 4th from London which clearly says that China has surpassed in the production of nuclear bombs and nuclear weapons, and also countries like America and Japan and also Europe are already admiring the capacity by which they are growing in this field. Even now the Deputy Minister said that they are capable of producing missiles which can be taken at a speed of 400 miles per hour or something like that. I would like to know how we are going to counteract this because our policy in nuclear weapons is an entirely different one. I would like to know how we arc going to counteract this in view of the progress which China is making.

## SHRIMATI INDIRA GANDHI:

This matter has been discussed on the floor of the House on so many occasions; we had special discussions and I had spoken on it also. While we are going ahead with research and other work in the field of atomic energy we are using this for peaceful purposes, and we think that the danger to us is far more from conventional weapons. But whatever we want to do, it is important first to strengthen our industrial and economic base before we shall be able to take anything else.

SHRI M. K. MOHTA : Has the attention of the Government been drawn to a news-item in which some nuclear scientists are reported to have said that it is possible to manufacture nuclear weapons in the backyard at a very low cost of as little as £25 sterling ? May I know whether the Government's own intelligence reports bear out that: statement, and whether according to the Govern- «. merit's information China has such technology ?

SHRIMATI INDIRA GANDHI : I am sorry I did not hear the first part of the question.

SHRI BHUPESH GUPTA : He said that it is being manufactured in the backyard.

SHRIMATI INDIRA GAM)!' It cannot be manufactured in ti backyard.

SHRI R. T. PARTHASARATHY: I would like to know from the Government whether, in view of the fact that China has attained superiority in the manufacturing of nuclear weapons and ballistic missiles, the Government thinks it prudent to seek the help of either the U.S.S.R. or the U.S.A. or both in the form of nuclear umbrella against possible Chinese attack.

SHRIMATI INDIRA GANDHI : No, Sir. I do not think that that would be in our interest.

श्रीमानसिंह वर्माः क्याप्रधान मंत्री महोदया इस वात का आख्वासन दे सकेगी कि यदि कभी चीन ने हमारे विरुद्ध एटम बमे का प्रयोग किया तो क्या आप उट्हे दंग

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की रक्षा कर सकेंगी। यदि हां, तो किन साधनों के द्वारा देश की रक्षा कर सकेंगी क्योंकि चीन का कोई विश्वास नहीं है कि बह किस समय इस तरह का एक्शन ले ले?

श्रीमती इन्दिरा गांधी: अगर न्युकलियर और अणुबम की लड़ाई हुई तो मेरा विश्वास है कि वह एक बहुत बड़ी चीख होगी। वह लड़ाई केवल भारत और चीन के बीच में हीं नहीं होगी बल्कि उसमें काफी दुनिया का हिस्सा आ जाएगा। इस तरह से सारा चित्र ही बदल जाता है और इस दृष्टिकोण से इस चीज को देखना है। इस वारे में मेरे लिए कुछ कहना सम्भव नहीं है, लेकिन मैं माननीय सदस्य से यह कहना चाहती हूं कि ये सब चीजें हमारे विचाराधीन है।

SHRI N. SRI RAMA REDDY : I would like to know from the hon. Prime Minister how many test explosions China has so far conducted. I would also like to know whether it has come to our notice that there is an Institute called the Institute of Strategic Studies in London who have assessed the nuclear capability of China recently, and according to that it is said that China is not having an abundance of fissionable material at their disposal and the pace at which they are conducting test explosions has slowed down of late. All these things show that there are serious disadvantages so far as development of missiles are concerned, especially Air Force missiles. I would like to know what the assessment of the Prime Minister is in this respect vis-a-vis the assessment of the Institute of Strategic Studies, London.

### SHRIMATI NANDINI SATPA-

THY : About the nuclear test explosions. China carried out eight nuclear explosions since 16th October, 1964 onwards. Then regarding the Institute in London that the lion. Member mentioned. I do not have any information at present with me. One thing I would like to add here about the centrifuge method. We know that the gaseous diffusion is being done by China. We also know that the centrifuge method is being worked upon by some countries of Europe also. We are not quite sure whether some other countries like the U.S.A., for example, are also doing that.

SHRIMATI INDIRA CANDHI : Sir, may I supplement that ? I have got to give details of the tests conducted by China. The first was on October 16, 1964: low yield up to 20 kilotons. The second was on May 13, 1965: it was a low intermediate yield, 20 to 200 kilo-tons. The third was on May 9, 1966; intermediate, which is 200 to 1000 tons range. The fourth one was on October 27, 1966: low intermediate 20 to 200 kilo-ions missiles delivered. The fifth was on December 28, 1966: 300 kilo-ions yield. The sixth was on June 17, 1967: Megaton range thermonuclear. The seventh one was on December 24, 1967: actual character of the test and its result are a matter which is not very clearly known. Then the eighth was on December 27, 1968: dropped from TU 16 aircraft; analysis revealed a yield of about 3.1 megaton.

# SHRI B. K. P. SINHA : May I

know if it is not a fact that the catalogue of arrangements and gadgets to which the Prime Minister referred are of a very-very elementary nature? The sophisticated and refined type of gadgets wrhich are necessary to keep a proper watch we do not possess. That is number one. Secondly, arising out of this, is it not a fact that the assessment of Chinese capability given by the Deputy Minister is based substantially not on our own firsthand knowledge but on unclassified material passed on to us by the Americans, the Japanese and the British?

SHRIMATI INDIRA GANDHI : It is both. We have our own tests. We naturally check what we find out with the knowledge that is gained by other institutes all over the world, is just one thing that is disturbing us. May I remind the hon. Prime Minister when Premier Chou En-lai visited us in the middle 1950's, after visiting the Trofnbay Institute I think he told the late Dr. Bhabha that we were far ahead in atomic scientific progress and that China was not so much up to the Indian standard then. ..

AN HON. MEMBER : That was a long time ago.

SHRI JOACHIM ALVA : VVhai 1 want to know is whether we are doing everything to maintain the standard pioneered by Dr. Bhabha and we will be ready for any eventuality?

SHRIMATI INDIRA GANDHI:

Sir, we are trying very hard and our scientists are doing excellent work in this direction.

## ENQUIRY INTO COSSIPORE FIRING INCIDENT

\*94. SARDAR RAM SINGH : Will the MINISTER OF DEFENCE be pleased to state :

(a) whether it is a fact that the Government of West Bengal have decided not to co-operate with the Centre in the enquiry into the firing incidents at Cossipore Gun and Shell Factory; and

(b) if so, the reaction of the Government of India in this regard ?

THE DEPUTY MINISTER IN THE MINISTRY OF DEFENCE (SHRI M. R. KRISHNA): (a) and (b) The Government of India have requested the Government of West Bengal to extend their co-operation to the Commission of Inquiry appointed to enquire into the firing incident at Gun and Shell Factor)'. Cossipore. The Government of India hope that their co-operation will be forthcoming.

SARDAR RAM SINGH : Sir. for the protection of (lie Central undertakings we are having the Central Reserve Police. The Central Reserve Police is thus distinct from the 'State Police, and they have distinct responsibility and powers. Now, I do not know how the State Police can do anything in this. I want to know whether this point was explained to the West Bengal Ministers when they came here that the State has nothing to do with this and the Centre should take all the responsibility for safeguarding the undertakings.

SHRI M. R. KRISHNA : It was very clearly explained to the State Government that these men who are guarding our factories wherever they may he, they are all governed by the Army Act, and according to the Army Act, all disciplinary proceedings will have to take place.

SARDAR RAM SINGH : What happened to those who were handcuffed and taken through the streets and put in jail? What action has been taken by the Government against the local police there?

SHRI M. R. KRISHNA : The Magistrate who went into these things also gave his own views which were not very favourable to the West Bengal Government. These people have now been released on bail.

श्वी सुन्दर सिंह भंडारी: मैं मंत्री महोदय से जानना चाहता हूं कि सभी दो दिन पहले ही यह साण्वासन देने के बाद कि सुरक्षा सधिकारी मिलिट्री ऐक्ट के संतंगत उसके दायरे में रहेंगे, क्या यह बात सच है कि एक श्री वर्मा जो वहां पर सिक्योरिटी साफिसर थे उन्होंने मैजिस्ट्रेट के सामने सरेंडर किया, मैजिस्ट्रेट ने उनकी जमानत लेने से इनकार किया है स्रौर वे झव जेल में बन्द हैं। तो मैं यह जानना चाहूंगा कि स्रगर सिक्योरिटी झाफिसर्स सिविल कोर्ट की जेल में हैं तो मिलिट्री कानून के अनुसार उनके खिलाफ झाने बढ़ना यह किस प्रकार से