to each and every publication of that publishing House in North Vietnam?

SHRI PILOO MODY: He should know.

SHRI DINESH SINGH: We did not find a serial number on this pamphlet.

SHRI JYOTIRMOY BASU: Then it is a fraud.

Request to National Aeronautics and Space Ageocy of U. S. A. for Carrying Indian made Equipment in Apollo Mission

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\*43. SHRI MOHAN SWARUP: SHRI P. VISWAMBHARAN: SHRI LAKHAN LAL KAPOOR:

Will the PRIME MINISTER be pleased to state:

- (a) whether Government have made a representation to the U.S. National Aeronautic and Space Agency for taking Indian made equipment for performing certain important experiments and be left on the Moon in one of the Apollo Missions;
- (b) if so, whether Government had any talks in this regard with the Atomic Energy Commissioner of U. S. A. during his recent visit to India; and
- (c) if so, the reaction of the U. S. Government thereto?

THE MINISTER OF SUPPLY AND OF STATE IN MINISTER THE MINISTRY OF FINANCE (SHRI R. K. KHADILKAR): (a) and (c). Government has made no representation as suggested by the Hon'ble Member. However, in response to an invitation from the National Aeronautics and Space Agency of USA a proposal for "A Study of Cosmic Rays on Lunar Surface" has been forwarded to that Agency. The equipment to be used in this study will be brought back and not left on the Moon. The reactions of the U.S. Space Agency are awaited.

(b) No, Sir.

श्री मोहन स्वरूप: मैं यह जानना चाहता है कि वे उपकरण क्या हैं और उनका प्रयोग किस काम में लावा जाने वाला है। SHRI R. K. KHADILKAR: This concerns the manufacture of small equipment which will be placed there under the shadow of the module for the study of cosmic rays.

SHRI K. LAKKAPPA: Is he a moon expert?

SHRI R. K. KHADILKAR: One Professor in the Tata Institute of Fundamental Research, Shri Biswas, in response to a request has forwarded this suggestion and it is under consideration.

SHRI P. VISWAMBHARAN: Dr. Vikram Sarabhai, Chairman of the Indian Atomic Energy Commission, said in Trivandrum on December 29 that Indian Scientific Groups had proposed to NASA that Indianmade equipment for performing important experiments be left on the moon during the Apollo Mission.

This shows that not only one person, but groups of scientists have approached the NASA. I would like to know from the Government whether they have sent these proposals in consultation with the Government of India. Secondly, the Minister said that some equipment was to be taken there and brought back but no less a person than Dr. Vikram Strabhai says that this equipment will be left on the moon. Which is correct I would like to know.

THE PRIME MINISTER, MINISTER OF FINANCE, MINISTER OF ATOMIC ENERGY AND MINISTER OF PLAN-NING (SHRIMATI INDIRA GANDHI): As my colleague has just said, we were asked by the NASA whether we would participate in this experiment in the lunar space mission. It is as a result of this that we invited suggestions, and Prof. Biswas's suggestion was sent by us to NASA. The objective of the experiment is to study the low energy cosmic ray nuclei of elements carbon to nickel, in the interval 4 to 50 Mev/nucleon. The intensity, energy spectrum, charge and composition and the spatial distribution of these nuclei will be measured using the lunar surface as a unique platform in space. In this experiment it is proposed to use thin stacks of nuclear emulsions and plastic sheets as detectors of low energy cosmic ray nuclei.

The equipment has not yet been assemb-

led, and it will only be done after the acceptance of the proposal. The latest information is that we can get the equipment back from the moon.

SHRI PILOO MODY: I think the Prime Minister should say this in Hindi.

MR. SPEAKER: I am so happy that the House has started taking interest in the moon.

SHRI AMIYANATH BOSE: The Prime Minister should make some arrangement so that a lecture is engaged to enable the Members to understand the answer.

श्री लक्षन लाल कपूर: मैं यह जानना चाहता हूँ कि जो उप्करएा यहां से भेजे जाएंगे श्रीर चन्द्रलोक में ले जाकर छोड़े जाएंगे वहां से वापस लाने के लिए उसी दौरान में लाने का प्रस्ताव सरकार कर रही है या उसको वहीं छोड़ कर श्राएंगे श्रीर दूसरा श्रपोलो जब जायेगा तब उसको वापस लायेंगे।

SHRI R. K. KHADILKAR: After six hours in the shade, the experiments will be complete, and on the return flight the equipment will be brought back for further analysis.

## Aircrash During Republic Day Flypast Rehearsal (1970)

\*64. SHRIMATI ILA
PALCHOUDHURI:
SHRI PRAKASH VIR SHASTRI:
SHRI K. P. SINGH DEO:
SHRI SITARAM KESRI:
SHRI YASHWANT SINGH

Will the Minister of DEFENCE be pleased to state :

KUSHWAH:

- (a) the causes of the reported failure of the engine of an Indian Air Force Plane, side to be a Mig 21, which was taking part in the Republic Day flypast rehearsal on the afternoon of the 23rd January, 1970;
  - (b) the approximate cost of the plane;
  - (c) the condition of the Pilot;
- (d) whether it was due to this crash that the fly-past by the Indian Air Force

planes was cancelled on the 26th January, 1970; and

Oral Answers

(e) if so, the steps taken to prevent a recurrence of such accidents in future?

THE DEPUTY MINISTER IN THE MINISTRY OF DEFENCE (SHRI M. R. KRISHN $\alpha$ ): (a) to (e). A statement is laid on the table of the House.

## Statement

- (a) A Court of Inquiry is investigating the accident and its report is awaited.
- (b) It is not in the public interest to disc'ose this information.
- (c) The pilot sustained multiple minor injuries.
- (d) No, Sir. The fly-past was not cancelled for helicopters, and Hunter aircraft emitting national colours, but in respect of the remaining aircraft due to bad weather along their routes.
- (e) Necessary remedial measures will be taken, as called for, in the light of the report of the Court of Inquiry.

SHRIMATI ILA PALCHOUDHURI: Has Ft. Lt. Singh been given some recognition for his extraordinary valour in saving the various populated areas of Delhi by diverting his plane to the Buddha Jayanti Park? Secondly, it has been said that there are careases and picnic remains in the Buddha Jayanti Park which attract birds, and this accident occurred because a bird was sucked into the jet hold. So, is the area going to be cleared up before any such rehearsal takes place in future?

SHRI M. R. KRISHNA: The enquiry has just now been completed and it is under the examination of the Command. It is too early for us to decide anything about giving recognition to the pilot. The third question is about clearing that place. All the parts which were lying in the park have already been collected and only on the basis of these things an enquiry is being conducted.

SHRIMATI ILA PALCHOUDHURI: Surely it is not too early to give him some recognition; it is considered to be valourous.

SHRI M. R. KRISHNA: All these things will be decided only after the completion of the scrutiny of the report.