

**Design of INSAT-IC**

8088. SHRI HARIHAR SOREN : Will the PRIME MINISTER be pleased to state :

(a) whether the design review for 'INSAT-IC' has been completed;

(b) whether 'INSAT-1B' now in space will be put together alongwith the satellite scheduled for launch aboard the space shuttle in 1985 and 1986; and

(c) if so, the details of the programme of the Government in launching satellites in 1984-85 onwards ?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ATOMIC ENERGY, SPACE, ELECTRONICS AND OCEAN DEVELOPMENT (SHRI SHIVRAJ V. PATIL) : (a) The preliminary design review for INSAT-IC has been completed.

(b) INSAT-1B Satellite which was originally meant to be an on-orbit spare satellite, is now the primary satellite located at 74°E. INSAT-1C is expected to be launched in the middle of 1986 by US Space Transportation System (STS) On reaching the allotted position at 94°E, INSAT-1C will become the on-orbit spare with some major path telecommunications utilisation.

(c) The programme for launching other satellites in the immediate future is as follows :—

(a) 150 kg. class (SROSS) Satellites for low earth missions in Science/Technology/Application (first launch tentatively planned for 1985 and the second for 1986) using our Augmented Satellite Launch Vehicle (ASLV).

(b) 1000 Kg. class polar orbiting remote sensing (IRS) satellites, the first one scheduled for

launch in 1986 by a Soviet Launch Vehicle. Later satellites of this series will be launched using our Polar Satellite Launch Vehicle (PSLV).

(c) INSAT-2 Spacecraft to replace INSAT-1 Spacecraft will be designed and built in India, the first test satellite of which will be launched in 1988/89 and operational Satellites in 1990/91. These Spacecrafts will be launched on Indian or procured launchers as appropriate.

**Performance of Instrumentation Industry**

8089. SHRIMATI JAYANTI PATNAIK : Will the Minister of INDUSTRY be pleased to state :

(a) whether the present performance and standard of Instrumentation Industry in the country is far from satisfactory and needs improvement;

(b) if so, the steps proposed to be taken by Government to step up the performance and project standard of instrumentation industry in near future; and

(c) the details thereof ?

THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY (SHRI PATTABHI RAMA RAO) : (a) Instrumentation Industry in India has made considerable progress and is in a position to meet most of the requirements of the country. However, the production is primarily restricted to low technology instruments except in process control instrumentation. Technological changes take place rapidly in the instrumentation industry. In the field of process control instrumentation, technology is shifting from pneumatic to electronic analog and micro-process based process control instruments. The performance of the country in the