

(a) whether it is a fact that the Leh region of Jammu and Kashmir remains cut off for almost half of the year by road mainly due to closure of Zozila Pass causing great inconvenience to the people of the area and thus alienates them from the country;

(b) whether any survey has been done for creating a tunnel at Zozila to connect the region for most part of the year;

(c) if so, when it was done and what is the status of the same;

(d) whether there is any plan of the Ministry to start the tunnel work; and

(e) if so, by when it is going to start and what is the time-frame for the same?

THE MINISTER OF DEFENCE (SHRI A.K. ANTONY): (a) Yes, Sir.

(b) and (c) The contract for feasibility study was awarded to M/s iBilt Technology, on 29.4.2009. Survey is under progress for the feasibility of tunnel at the Zozila Pass and other locations along this axis to Leh and is in advanced stage. It is likely to be completed by March 2012.

(d) and (e) Decision about construction of tunnel would depend on the outcome of the feasibility study.

#### **new inventions by DRDO**

†3139. SHRI BHARATSINH PRABHATSINH PARMAR:

SHRI PARSHOTTAM KHODABHAI RUPALA:

Will the Minister of DEFENCE be pleased to state:

(a) the details of new inventions made by Defence Research and Development Organisation (DRDO) on defence equipments and security of defence personnel during the past three years and the time by when benefits thereof would be available to our defence personnel; and

(b) whether the State police are getting the benefits of any of new techniques developed by DRDO?

THE MINISTER OF DEFENCE (SHRI A.K. ANTONY): (a) Defence Research and Development Organisation (DRDO) is primarily engaged in design and development of strategic, complex and security sensitive systems for our Defence Forces. Over the three years, DRDO has developed a

number of defence equipment which have been used by the Defence Forces. Some of the significant systems are Flame Retardant Flying Clothing, such as Flying Overall, Flying Gloves for the Pilots of Light Combat Aircraft, Flame Retardant Life Preserver Unit for Sea/Land Survival Aid Protection, Extreme Cold Climate Clothing, Anti-g Suit, Combat Free Fall System, Battery Heated Shoe Insoles, Submarine Escape Set, Helicopter Oxygen System, High Altitude Bio-digester, Auto Injector, Herbal Adjuvant, Lightweight (300 gm & 2 kg versions) Micro Air Vehicles (MAVs), Aerostat Health Monitoring System (AHMS), Short Span Bridging System (5 m & 10 m), Netra Unmanned Aerial Vehicle (UAV) - for Aerial Surveillance, Remotely Operated Vehicle for IED Handling, Riot Control Vehicle, Bullet Proof Lightweight Vehicle, Unmanned Ground Vehicle, Electro-Optic Fire Control System, Lightweight Laser Target Designator cum Imager, Compact Lightweight Mobile Satcom Terminal, Laser Ordnance Disposal System, Grenades, Plastic Bullets, Combat Net Radio (CNR), S-Band Briefcase Satcom Terminals, Combat Identification of Friend or Foe Systems for Armed Fighting Vehicles (AFVs), Laser Dazzler, Small Arm Systems, NBC Protection System, Performance Enhancement Drugs, etc. Besides these, DRDO has filed 313 patents and granted 126 patents during the last three years. DRDO has been awarded the prestigious Thomson Reuters India Innovation Award in 2011 in "High-tech Academic and Government" category.

(b) Yes, Sir. State Police are getting benefits by using DRDO developed systems/technologies. Some of them are Less Lethal Plastic Bullets, Grenades, Riot Control Vehicle, etc. Chandigarh Police is testing DRDO developed Lightweight Unmanned Aerial Vehicle for surveillance purpose.

#### **New aircrafts by IAF**

3140. SHRI MOHD. ALI KHAN:

SHRIMATI T. RATNA BAI:

Will the Minister of DEFENCE be pleased to state:

(a) whether Indian Air Force (IAF) propose to spend \$ 50 billion on new aircrafts from 2012-17; and

(b) if so, the details thereof and the steps being taken so far?

THE MINISTER OF DEFENCE (SHRI A.K. ANTONY): (a) and (b) Capability building which includes both upgrade of existing aircraft as well as procurement of new aircraft is undertaken as per the Long Term Plan of the Indian Air Force. The expenditure likely to be incurred on procurement of