

## **“Ambulance Bike -Rakshita”**

In low intensity combat areas immediate evacuation of security personnel of our security and paramilitary forces operating in the naxal-affected area is always fraught with danger due to heavily IED mined, non-existent roads, congested streets or interior locations. Soldiers move either on foot or on bikes due to unpaved and narrow roads, to eliminate the risk of being caught in an IED explosion or of a surprise attack. Operational problem of not-well equipped ambulance and non availability of trained medics make the situation even worse to provide medical aid to injured soldiers.

Institute of Nuclear Medicine and Allied Science (INMAS), a Delhi-based DRDO laboratory, has developed a bike ambulance called “Rakshita” to overcome the problems faced by our security forces to provide immediate first-aid and fast evacuation of injured soldier to nearest health centre. Rakshita comprises a special reclaimable quick fit-in and fit out “Pillion Casualty Evacuation Seat” made from high strength stainless steel or aluminium alloy. The seat is ergonomically designed to take care of the body contours and ensure the comfort of the patient. It features an adjustable headrest, lumbar support and movable arm rest and can be adjusted into comfortable semi sleeping position.

It is equipped with basic medical equipment with the capability of providing emergency medical aid at a remote site and during transportation of the injured/sick from the site to the nearest medical facility/hospital. It is equipped with first aid box, emergency medical equipment like splints, head immobilizer, oxygen supplying kit. Telescopic I.V. fluid bag-stand and vital physiological parameter measuring equipment with blue tooth communication capability. The vital parameters of the injured can be seen by the paramedic cum driver through the monitor fitted in front of him. The injured physiological parameters can be transmitted to nearby health facility also for further necessary preparation before reaching the injured. It is also fitted with siren and flasher warning light for easy access.

The compact Rakshita can reach at the required site within the golden hours to ensure the spot first aid along with quick and effective rescue of the casualty. Cost-effective Rakshita can also be effectively used in narrow congested un-motorable bylines and road of any city where medical contingencies cannot be provided by a conventional ambulance.