

**GOVERNMENT OF INDIA, MINISTRY OF DEFENCE
DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION
AERIAL DELIVERY RESEARCH & DEVELOPMENT ESTABLISHMENT (ADR&DE)
STATION ROAD, AGRA-282001**

Introduction:

ADRDE has developed ejection seat parachute for Su-30 aircraft. This parachute is used by pilot during emergency for safe landing over land or water.

Aim:

To find suitable industrial partners for bulk production of this parachute to meet the futuristic requirement of IAF. DRDO will transfer the technology to industrial partner (called vendor hereafter) for bulk production.

Future Scope:

Based on the present projection, it is anticipated that there will be a requirement of qty. 350 nos. (approx.) in next five years. However, DRDO does not guarantee the orders from the users.

System Description:

The ejection seat parachute assembly consists of following components:

- a) Pilot Canopy (area 60 m²) - fabricated with fabrics and various cordages (Fig-1)
- b) Harness – fabricated with webbings, tapes, and metal parts (Fig-2)
- c) Sleeve- fabricated with fabric and tapes
- d) Container- fabricated with fabric and tapes
- e) Connecting loop, pin with loop, closing loop
- f) Stabilizer parachute

The main parachute is packed inside the headrest of ejection seat. The headrest is fired from the seat after completion of time delay and/or attitude depending on speed and altitude of aircraft flying at the time of ejection. On jettisoning of headrest, locking pins of headrest pulled out which allow withdrawal of main parachute from the headrest along with sleeve. Once complete lines of the main parachute are withdrawn from the sleeve, the canopy portion comes out from the sleeve. Finally, by snapping of break link headrest gets separated from canopy. The headrest with the cover and the canopy deployment bag secured to it separates from the parachute. Then the Pilot descends with fully deployed parachute on land or sea surface.



Fig-1: Pilot canopy

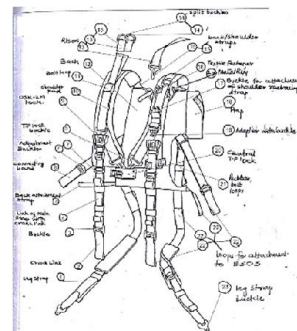


Fig-2: Harness

PRE-QUALIFICATION CRITERIA

1. Only Indian company wholly owned by Indian individual are allowed to participate in this EOI.
2. Company should possess Certificate of registration as manufacturing unit, if any.
3. The company should have minimum annual turnover of Rs. 5 Crores for the last three financial years. Fundamentals of the company, like company profile, balance sheets and income tax returns etc. for last three years will be mandatory to assess the capability of the firm to undertake the order for subsequent bulk production.
4. On receipt of EOIs, the same will be scrutinised by a committee of experts duly constituted by competent authority who shall assess the suitability of the firms for this task. If required, the committee may visit the bidders' premises for assessment.
5. Vendor has to fabricate qty.01 nos. of Pilot Parachute and harness each and supply to ADRDE for evaluation. Thus qualified vendor will be considered for final ToT.
6. DRDO at its discretion can transfer the technology to more than one vendor.
7. DRDO does not guarantee the orders from the users.

FORMAT FOR APPLICATION FOR EXPRESSION OF INTEREST

Details to be enclosed as Annexures

1.	Name and full address of the Organization	
2.	Management structure	
3.	Contact Person with designation	
4.	Contact telephone numbers and fax no. and email address	
5.	Current operational areas of work	
6.	Turnover for last three years	
7.	Approval/registration with any Govt./Agency	
8.	Details of expertise available in the production of parachutes	
9.	Regular manpower available on roll	
10.	Available in house analysis facility, quality assurance/quality control facility	
11.	Area of work where expertise available, please elaborate (fabrication of parachutes and related accessories)	
12.	Similar work done for any government agency such as DRDO/OEF/DGOF	
13.	Any other credentials in the subject area	
14.	Acceptance of ADRDE terms and conditions	

