Fabrication of Pilot Parachute Assembly, Part No. ADRDE/1.2-03-00 for MiG-29 aircraft

Pilot Parachute Assembly, Part No. ADRDE/1.2-03-00 for MiG-29 aircraft is lifesaving equipment. It is installed on the ejection seat. During emergency/malfunctioning of aircraft, pilot pulls the firing handle which in turn activate the Emergency Escape System (EES). On activation of EES, main canopy is pulled out of headrest of ejection seat and on inflation of canopy, it brings down the pilot safely on ground or water. Pilot parachute mainly consists of following subsystems:

(i)   Main Canopy: It is used to reduce the speed of pilot for safe landing on ground or water. It is made of nylon fabric, cordages and tapes.
(ii)   Harness: It is a coupling element between ejection seat and main canopy. It is made narrow fabrics i.e. various tapes and webbings and metallic components.
(iii)   Sleeve: It is used to pack the main canopy for controlled deployment
(iv)   Container: It is used to house sleeve packed with main canopy.

Pilot parachute system is fabricated using various textile materials and metal parts. The textile materials consist of fabrics, narrow fabrics (tapes and webbings), cordages. Majority of textile materials are made of Nylon6/Nylon66 and few of Polyester and Cotton. The metal parts consist of buckles/lugs made of ferrous based alloy and aluminum-based alloy. In order to fabricate the pilot parachute system firms, should have industrial sewing machines and skilled manpower in cutting/tailoring/stitching of textile materials.

Fig: Pilot Parachute Fig: Container   Fig: Sleeve   Fig: Harness

Contact Details

Interested companies/industries are requested to apply against this EoI to following address:-

To,

Director

Aerial Delivery Research and Development Establishment (ADRDE)
PO Box 51, Station Road
Agra Cantt – 282001

Email- director.adrde@gov.in

Copy to (without attachment)

The

Director Directorate of Industry Interface & Technology Management (DIITM) Room No. 447, DRDO Bhawan, Rajaji Marg, New Delhi-110 011

Email-diitm.hqr@gov.in

List of Support documents to be attached with EoI

(a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, as amended time to time)

(b) Certificates of registration as a manufacturing unit, if any.

(c) Audited Balance Sheet for the preceding three years.

(d) Income Tax returns for the preceding three year period

(e) Details of shareholding/ownership pattern especially foreign partners/ shareholders, foreign employees, directors, etc. The company must adhere to the prevailing Govt of India policies and regulations on Foreign Direct Investment (FDI)/DIPP norms as applicable.

(f) Annual budget for R&D during last three years.

(g) Numbers and details of IPR or patents, etc., held by the company.

(h) Number of technically or professionally qualified personnel.

(i) Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).

(j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise.

(k) List of Testing and Support equipment's

(l) ISO/ ISI certification or any other certification

(m) Relevant clearances form the authorities/ ministries (if any)

(n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.

(o) Capacity/capability to market the product through the marketing network, sales and service

network, reliability to maintain confidentiality.

(p) PESO and DPIIT license for explosive handling if ToT is for high energy Material, explosives, propellants, and component/ system dealing with it etc.

(q) Under taking form company seeking ToT that none of its Directors, Independent Directors, non-executive Directors, Key management personnel are involved in any corrupt practices, unfair means and illegal activities.

(r) Details of the industrials license for defence manufacturing be provided by the industry seeking ToTs.