

Fabrication of Pilot Parachute Assembly, Part No. ADRDE/1197

Pilot Parachute Assembly, Part No. ADRDE/1197 is a 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 seat and on inflation of canopy, it brings down the pilot safely on ground or water. Pilot parachute mainly consists of following subsystems:

- (i) First stage drogue parachute sub system
- (ii) Second stage drogue parachute sub system
- (iii) Main Canopy
- (iv) Harness

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 Kevlar 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 including Quality Assurance infrastructure.