

PIA Informational Advisory

<u>To:</u> Parachute System Manufacturers - Worldwide

Date: 24 August 2017

<u>Subject:</u> Fabric Coating Degradation

Equipment: Harness/Containers, Deployment Bags & Other Components

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## Scope

"Fabric Coating Degradation" potentially affecting parachute system performance.

### Background

A product service bulletin (PSB) issued from Europe in 2016 has reestablished the concern for polyurethane fabric coatings that have changed their chemical composition; essentially transforming from a dry, flexible state into one that becomes tacky, with noticeable adhesive properties.

The PSB (mentioned above) affected harness/container systems made with Cordura fabric with the exposed polyurethane coating inside the reserve container. The affected containers exhibited no issues during regular four (4) month inspection cycles, over many years. However, subsequent inspections indicated a sticky surface had developed. These systems were produced in 2004, 2005 and 2009.

Over the last 35 years, similar issues have been reported by other manufacturers. Several causes have been identified that may affect the longevity of polyurethane (and possibly other) fabric coatings:

- Age of the material
- Harsh environmental storage or use conditions (extreme temperature and humidity)
- Sub-standard coatings (with different chemical compositions)

## Advisory

Parachute system manufacturers should carefully consider the application and placement of coated fabrics used for containers, deployment bags and other components that come in direct contact with reserve and main parachutes. It is highly recommended that coated sides of fabric be covered with another fabric (Para Pack or other low-denier nylon) to prevent the coating, should it become sticky, from coming in contact with deployment bags, pilot chutes, parachute fabric or suspension lines.

#### **Objective**

The goal of this advisory is to ensure that if fabric coatings were to degrade, a protective layer of fabric will help ensure the functional capabilities of the parachute system are not affected.

If you have any questions regarding this advisory, please contact the PIA technical committee.

#### PIA - Technical Committee

T.K. DONLE – Chair (<a href="mailto:technicalchair@pia.com">technicalchair@pia.com</a>)
NORMAN GIRDWOOD – Co-Chair (<a href="mailto:noman@g7t.com">noman@g7t.com</a>)