



## **PIA - Position Statement**

**To:**            ***Wingsuit Flyers & Manufacturers – FAI & World Parachute Organizations***

**Date:**            ***20 July 2017***

**Subject:**        ***Emergency Handles Relocation – TSO (or Foreign Equivalent) Violations***

**Equipment:**    ***Harness/Container Systems & Wingsuits – Combined Airworthiness***

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### ***Scope***

The evolution of advanced wingsuit designs are, in some cases, requiring the harness/container's (H/C) emergency handles (cutaway & reserve) be relocated from their standard harness location to special ripcord pockets built into the wingsuit. H/Cs are approved parachute components certified under Federal Aviation Administration (FAA) – Technical Standard Orders (TSO), to include foreign equivalent authorizations as well. Modifications of this magnitude, including “handle extensions,” may alter the system's safety and performance capabilities.

### ***Background***

Recent aerodynamic improvements in wingsuit design are striving to create a more efficient frontal surface to increase the suit's in-flight performance. Several advanced wingsuits are specifically designed to cover the front of the harness (MLW and Chest Strap), including the emergency handles. These types of wingsuits may require the cutaway and reserve handles be removed from their ripcord pockets on the MLW and relocated to special pockets built into the front of the wingsuit. However, there are no documented testing standards in place to determine airworthiness of the H/C's emergency capabilities when the handles are moved to ripcord pockets on the wingsuit. Nor is it clear what level of testing is performed by wingsuit manufacturers prior to the sale of these wingsuits.

### ***Position Statement***

It is the collective opinion of the *Parachute Industry Association's Technical Committee (PIA-TC)* that modifications to relocate the emergency handles from the harness to ripcord pockets on the wingsuit are “alterations” to the H/C's existing TSO (or foreign equivalent) authorizations, which requires H/C manufacturer or FAA approval. Additionally, this approval should be based on demonstrated operational compatibility between a specific wingsuit and a specific harness/container, each identified by serial number or equivalent. Wingsuit manufacturers are responsible for obtaining the proper authorizations for such alterations.

### ***Objective***

It is not the intent of PIA to stifle the development or innovation of future wingsuit designs, but rather to ensure these developments are properly tested for airworthiness in conjunction with the applicable H/C, thereby contributing to the continued growth and safety of wingsuit flight.

The *PIA Technical Committee* may produce\* an interface document outlining the testing protocol based upon sections of TS-135 applicable to testing the operational compatibility between a specific harness/container system and a specific wingsuit. (\* Subject to PIA-TC approval)

Any questions regarding this position statement should be directed to the *PIA Technical Committee*.

### **PIA - Technical Committee - POC**

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