

### **SERVICE BULLETIN**

**DATE:** July 27, 2011

SERVICE BULLETIN #: 2011001

**SUBJECT:** ICARUS Canopies - NEOS hard openings

**STATUS:** SERVICE HIGHLY RECOMMENDED

**#OF PAGES**: 3 pages

#### **IDENTIFICATION:**

This Service bulletin is applicable to all NEOS parachutes P/N 317524-XXX for Serial Numbers prior to 24112612 in all canopy sizes.

#### **BACKGROUND:**

The NEOS is a highly elliptical, ARC braced, high performance canopy with one of the most predictable on-heading deployments in the market today. Since it was introduced we have been receiving an increased number of complaints about occasional hard openings. Even though most NEOS canop ies present soft on-heading openings, a few of them seem to produce random hard openings more frequently.

In order to understand the phenomena causing the hard openings to occur, we had to replicate the problem in-house. The randomness of the hard openings resulted in no video documentation. We initiated an investigation but found many difficulties in replicating the hard openings. Finally, we gathered a number of problematic canopies from the field, and put them through a comprehensive test program. After some time, we finally managed to reproduce hard openings under video monitoring that allowed us to develop an understanding of the source of the problem. By test jumping extreme variations of the problem, we managed to develop a solution that responded to our expectations. After hundreds of jumps to consolidate the change, we have revised the line set specification by modifying the length of one outer suspension line on each side of the canopy. This modification does not change the other performance characteristics of the canopy.

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All NEOS parachutes identified in this document shall be upgraded following these procedures.

An inspection/operation must be performed by a FAA Certified Master/Senior Parachute Rigger, foreign equivalent, or ICARUS Canopies.

The Inspector must perform the following steps:



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- 1. Follow the Technical Order OTEC870017-NEOS MODIFICATION
- 2. Produce a Record by completing the Form below, with the following information:
  - a. Parachute Part Number
  - b. Canopy Size (in square feet)
  - c. Serial Number
  - d. Manufacturing Data (DOM)
  - e. Explain the service done. C1 lines changed and checked. Warning Label "C1" identification MARK.
  - f. Name, Address, Phone Number, e-mail, of FAA Certified Master/Senior Parachute Rigger or foreign equivalent.
  - g. Date of service.
- 3. Send the Record to

**ICARUS** Canopies

icarusorders.eu@icaruscanopies.aero

#### **COMPLIANCE DATE:**

As soon as possible, prior to next use

#### **AUTHORITY:**

**ICARUS** Canopies

#### **DISTRIBUTION:**

- 1. ICARUS Canopies website, Facebook, and Dropzone.com
- 2. ICARUS Canopies dealer network

#### **REFERENCE DOCUMENTS:**

OTEC870017 NEOS MODIFICATION



# INSPECTION/OPERATION RECORD

RECORD DATE:		
TECHNICAL ORDER		OTEC870017
MASTER/SENIOR RIGGER DATA:		
	NAME:	
ADDRESS:		
PHONE #:		
E-MAIL:		
CANOPY SIZE (ft <sup>2</sup> )		
SERIAL NUMBER		
MANUFACTURING DATE		
	C1 LINES CHANGED	
	STOP SLIDER	
DESCRIPTION	POSITION	
OF SERVICE	CHECKED	
	WARNING LABEL	
	"C1" MARKED	
SERVICE DATE		