

## **Service life and Retirement**

This document is a guideline to the expectations of equipment manufactured by Robertson Harness. There are many factors that can exponentially extend or shorten a harness or lanyard Service Life. It is the position of Robertson Harness to endorse the following.

**Lanyards** carry a maximum Service Life of Five Years, or condition from first point of use. Seven Year Shelf Life. Terms and Conditions do apply on Shelf Life. Contact the manufacturer for details. Service Life expectancy is a general guideline and not intended to be used as an absolute.

**Harnesses** carry a "One minute to Ten Year Service Life or condition with a Fifteen Year Shelf Life." Terms and Conditions do apply on Shelf Life. Contact the manufacturer for details. This includes but not limited to; Required Point of Use Visual inspection, and an Annual Third Party Inspection from a "Qualified Person" such as defined by OSHA (Occupational Safety & Health Administration). This is to ensure serviceable conditions and proper operation. It is recommended you document the "in service date" located on the warning label of harnesses when putting into service. Service Life expectancy is a general guideline and not intended to be used as an absolute.

-These guideline only applies to products demonstrating no visual damage and that knowingly have not been exposed to chemicals, abnormal heat, or excessive ultraviolet light. Equipment can have a short or longer service life depending on its care, use, and storage. Always know the history of use and exposures of your equipment. When in doubt, Retire.

-Robertson recommends as a general guideline, documentation is crucial with life safety gear. Following inspections & instructions may still necessitate removing the harness or lanyard from service prior to the expiration of the life expectancy guideline. Ultimately, it is the responsibility of the end-user to determine when a harness or lanyard is unfit for use and should be removed from service. The best and most qualified person to tell an employer when to retire equipment is a competent and qualified inspector on site. This requires point of use visual inspections along with an Annual Third Party Inspection from a "Qualified Person" such as defined by OSHA (Occupational Safety & Health Administration). Robertson Harness does not recommend or endorse going beyond established service life or shelf life recommendations.

**-When a harness has been involved in a severe fall, but is not obviously damaged. It must be retired immediately. If you have any doubts about the dependability of your harness, retire it and get a new one.**

\* Products removed from service should be disposed of in a manner that prevents inadvertent further use.

Each harness and lanyard shipped by Robertson Harness is accompanied by specific instructions for use. If lost or not included, these documents can be found on our website or sent upon request.

[www.RobertsonHarness.com](http://www.RobertsonHarness.com)

## Usage of a harness in relation to Zip Lines/Canopy Tours

Hourly usage does not implicitly transfer into the life of a harness for many zip lines. We prefer the breakdown of usage in terms of cycles. Here is how we look at cycles when it comes to harnesses and lanyards. \* A cycle is a single pass down a line, if a course consists of nine separate zip lines this equates to nine cycles on that piece of equipment. Below are examples of typical ziplines cycles

### Example (1) operating 7 days a week

Cycles per day	200
# of harnesses used daily in those cycles	65
# of times each harness is used daily	3
# of times each harness is used in six months	548
# of times each harness is used annually	1,095
# of times each harness is used over a five years life	5,475
Initial cost of harness	\$52.00
Cost of harness at 5,200 cycles	.01 cents

### Example (2) operating 4 days a week

Cycles per day	400
# of harnesses used daily in those cycles	50
# of times each harness is used daily	8
# of times each harness is used in six months	832
# of times each harness is used annually	1,664
# of times each harness is used over a five years life	8,320
Initial cost of harness	\$34.00
Cost of harness at 3,400 cycles	.01 cents

## Heavy to Extreme use

### Example (3) operating 7 days a week

Cycles per day	1,500
# of harnesses used daily in those cycles	100
# of times each harness is used daily	15
# of times each harness is used in six months	2,730
# of times each harness is used annually	5,460
# of times each harness is used over a five years life	27,300
Initial cost of harness	\$76.00
Cost of harness at 1,900 cycles	.04 cents

## Usage of a harness in relation to a ropes course.

### Example (4) Full Body Harness used 6 months a year

#### Activity: Leap of Faith

Cycles per day	3
# of harnesses used daily in those cycles	1
# of times each harness is used daily	3
# of times each harness is used in six months	548
# of times each harness is used over a five years life	2790
# of times each harness is used over a ten years life	5480
Initial cost of harness	\$120.00
Cost of harness at 744 cycles	.16 cents

