

Military & Bespoke Applications

SOFT LANDING SYSTEM

There when you need it



Introduction

**SOFT LANDING
SYSTEM**

There when you need it

The Forest Group was set up in 2000, initially to provide solutions to health and safety issues facing the housebuilding industry. In 2002 the company was awarded first prize in the prestigious HSBC Start-up Stars competition for innovative new businesses.

Today Forest Safety Products Ltd is the UK's leading manufacturer of passive fall arrest systems for use in the building industry. The Soft Landing System is extensively used nationally by all the leading construction and housebuilding companies.

Due to today's ever expanding health and safety requirements Forest Safety Products Ltd has extended its range to include bespoke products tailored for specific applications, ranging from the Construction industry to the Ministry of defence.

The current product range includes:

- Soft Landing System
- Soft Landing Lorry bags
- Soft Landing Bespoke Lines

The system advantages and benefits include:

- Quick and easy installation.
- Cost Savings.
- Saves time.
- HSE Compliant.
- Conforms to PAS 59
- Supported by BRE test results
- Lightweight.
- Maintenance free.
- Unaffected by severe weather conditions
- Proven track record in reducing injuries.
- Adaptable for a variety of uses.
- Complies with Montreal protocol.
- Low FOD risk due to construction.
- Support training and inspection throughout life of product.

We invite you to browse through the various product details enclosed, which range from pre-production design stages and applications. We also welcome any enquiries or questions you might have.

Forest Safety Products Ltd, Stardens Works,
Tewkesbury Road, Newent, Gloucestershire GL18 1LG
www.forestgroupuk.co.uk

 **The Forest Group**
High performance, versatile solutions

Military Applications

Rotary and fixed wing



Design and bespoke product trials
and alterations

BS5438 1976: Method 2
BS5438 1989: Method 2a / 2b
BS5867 Part 2 1980: Type B
BS5852

Rotary

Aviation soft landing system case study

Vector Aerospace Helicopter Services – Fleetlands, UK

Fleetlands, Gosport, Hampshire, UK PO13 0AA

Commissioned by:

WAH Specialist – Joanne Barringer

Fire Officer – Jim Bourne

Problem

Vector Aerospace were looking to find a solution for a specific risk of fall from height, whereby the person or persons working on the spine and pylons of the aircraft in final flight test stage could have fall protection. Conventional bespoke staging in this application was not an effective method, due to the rotors being in position and having to be turned, so consequently overhead harnesses were not an option. The product also had to conform to strict F.O.D issues and flame retardancy requirements stipulated by Vector Aerospace and the M.O.D.

Solution

Liaised with Joanne Barringer and Jim Bourne at Vector Aerospace, to design and produce a range of fall arrest products specific to the application. During the design stage a range of prototype products were produced for approval and modification where required, and on final approval were manufactured in compliant material that was resistant to aviation fuel and various hydraulic oils that would be used in the maintenance procedures.

Summary and benefits

Final purchased product in green compliant material, bespoke corner bags for the rear of the aircraft, and extension bags for increased fall arrest area at the rear pylon.

The key benefits offered by this product are:

- Flexibility of usage as opposed to staging or harness systems.
- Cost saving
- Ease of use “simple installation and training facility available”
- Minimal product maintenance.
- Product inspection facility available.



Trial and design stage



1200 Aviation system

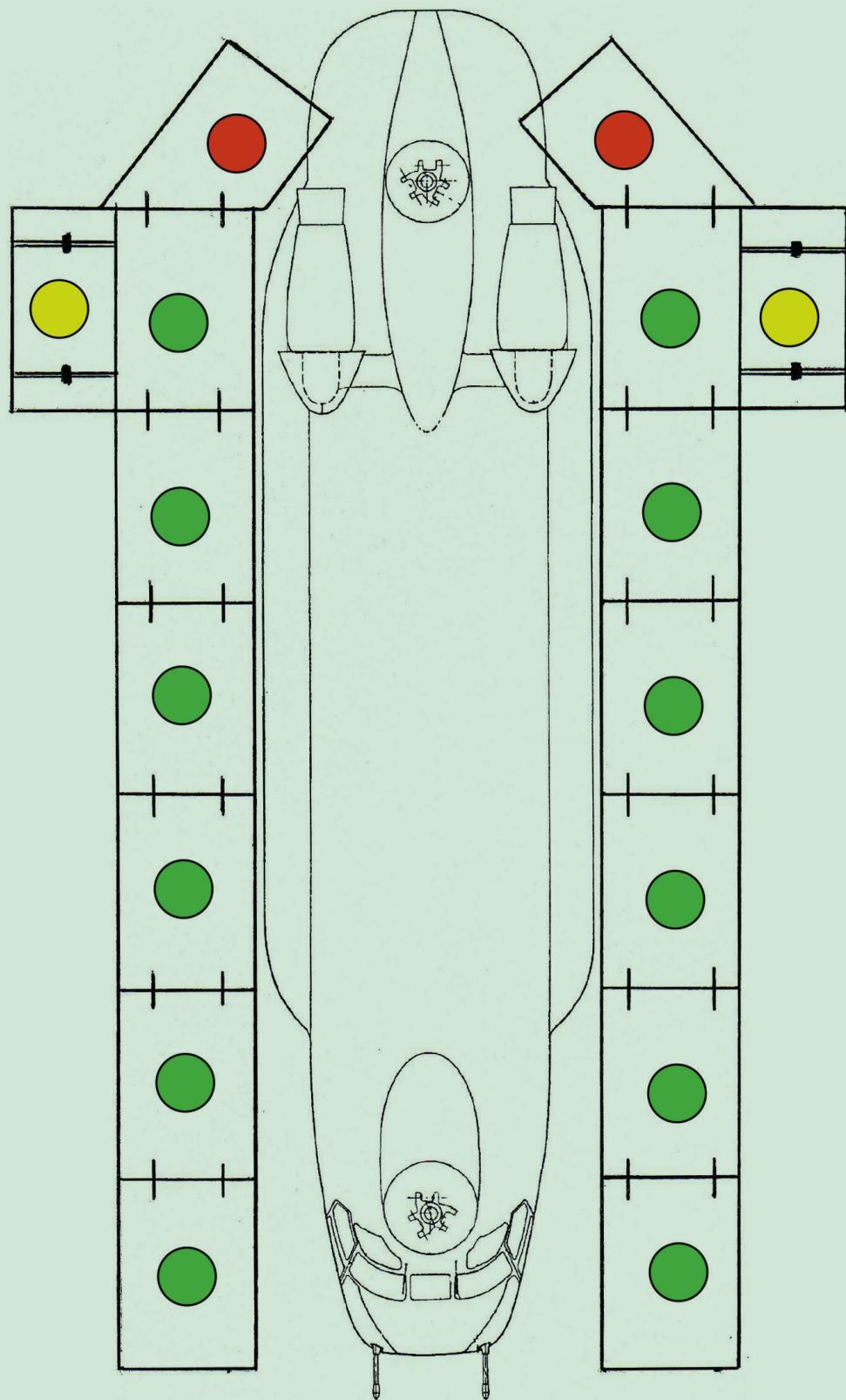
Chinook soft landing system

Installation guide

■ Rear aviation angle bags

■ Rear pylon area extension bags

■ Standard aviation bags



Not to scale

Fixed wing

Aviation soft landing system case study

BAE Systems

Royal Air Force Cottesmore, Okham, Rutland UK LE15 7BL

Commissioned by:

SHE Manager – George Connelly

Problem

BAE Systems were looking for a solution for various stages of maintenance on their aircraft repair line, where conventional staging wouldn't suit the applications required. In particular wing maintenance, aircraft spine and nose cone work. The product manufactured had to be quick and easy to use, able to cover the desired fall areas and as with other avionic products, comply to strict F.O.D guidelines and flame retardant requirements.

Solution

Liaised with George Connelly at BAE Systems, design and manufacture a range of bespoke fall arrest bags that can be used in all the aforementioned applications. Prototype polypropylene bags were produced for the trial and the approval of BAE which were tailored to the specific requirements. The final bags were produced in compliant materials, resistant to aviation fuels and the various hydraulic fluids used in the aircraft maintenance procedures.

Summary and benefits

Final purchased product in green compliant material and tailored to the specific size requirements suitable for all the aforementioned fall risk areas. A4 Pouches attached to every bag to enable product information and any desired literature to be easily visible to the work force.

The key benefits offered by this product are:

- Flexibility of use compared to staging or harness systems.
- Cost saving
- Ease of use – simple installation and training facility available.
- Minimal product maintenance.
- Product inspection facility available.
- F.O.D. and flame retardant statements
- Double stack to increase working at height



Single 600 Aviation system



Double stacked 600 Aviation system

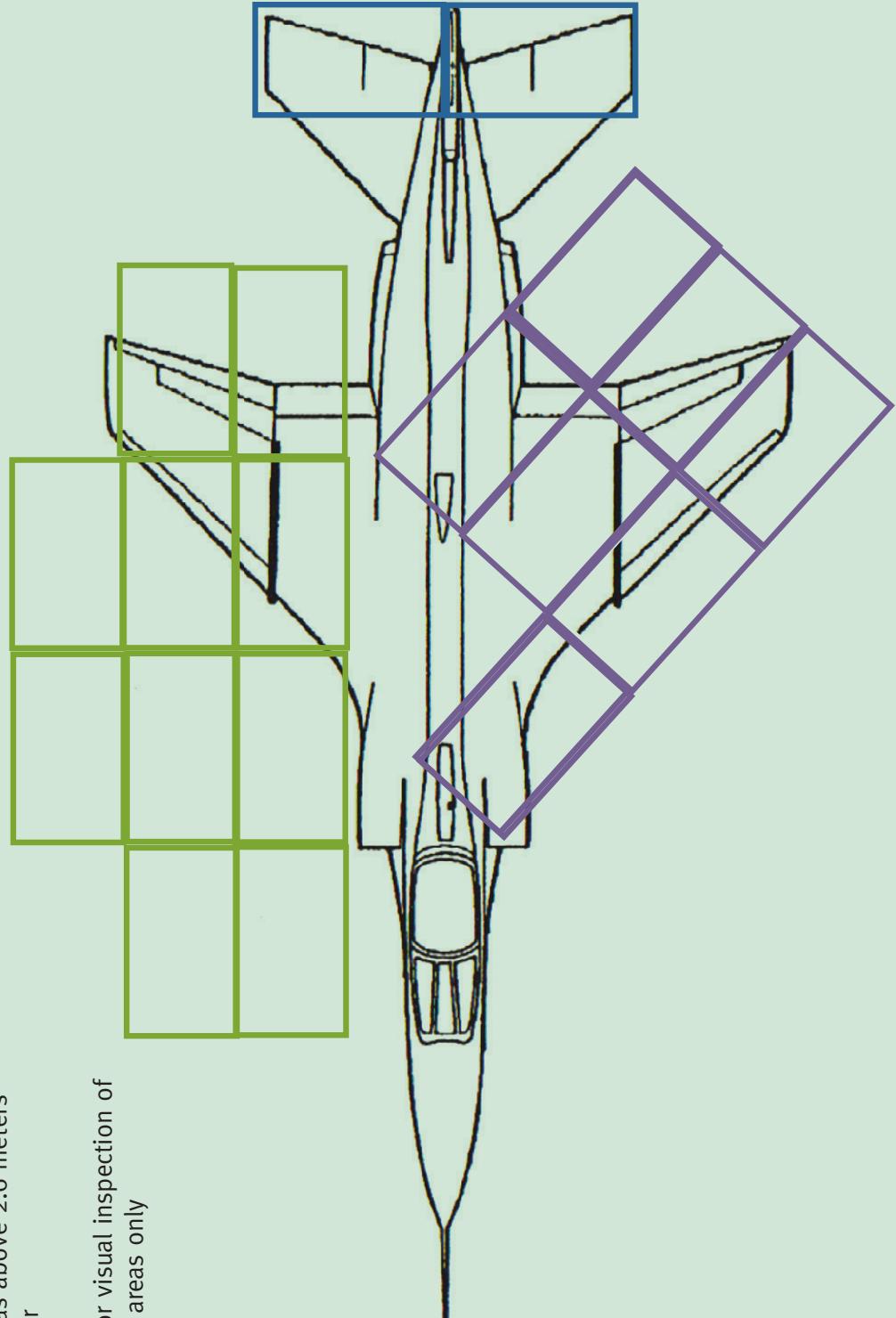
RAF Jaguar aircraft

Solutions for fall arrest units when servicing RAF Jaguar aircraft

■ Solution when servicing all areas from rear of cockpit to tail

■ Double bags if crew required to access areas above 2.6 meters above floor

■ Solution for visual inspection of main wing areas only



To keep cost to a minimum and flexibility to a maximum we have selected a solution using only one size Safety Mats. L2500mm x W1800mm x H600mm

Not to scale

Aviation soft landing system

Bespoke product design & development

Commissioned by:

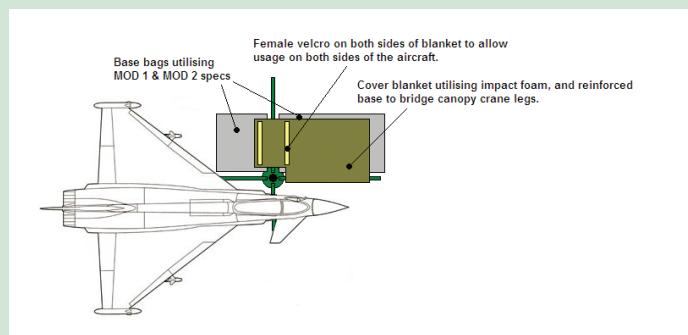
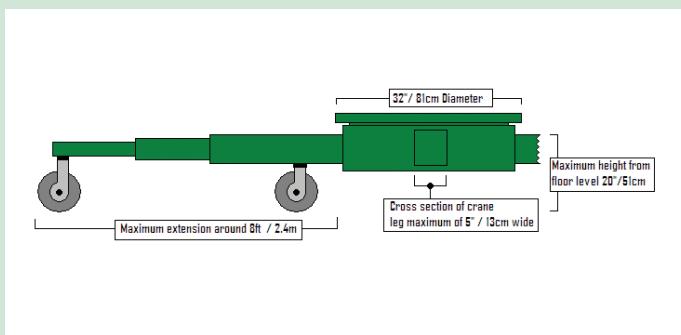
BAE Systems, Royal Air Force Coningsby, Lincolnshire, UK LN4 4SY

Problem

Requirement for a solution to a specific application within a Typhoon hanger. The product manufactured had to be quick and easy to use, able to cover and protect the desired fall areas and as with other avionic products, comply to strict F.O.D. guidelines and flame retardant requirements.

Bespoke product design and development phase

After being approached with a potential Health & Safety risk whilst working at heights, Forest Safety Products will closely liaise and work with our clients to identify the risk in full through a full evaluation. This will then proceed into the design and prototype development phase.



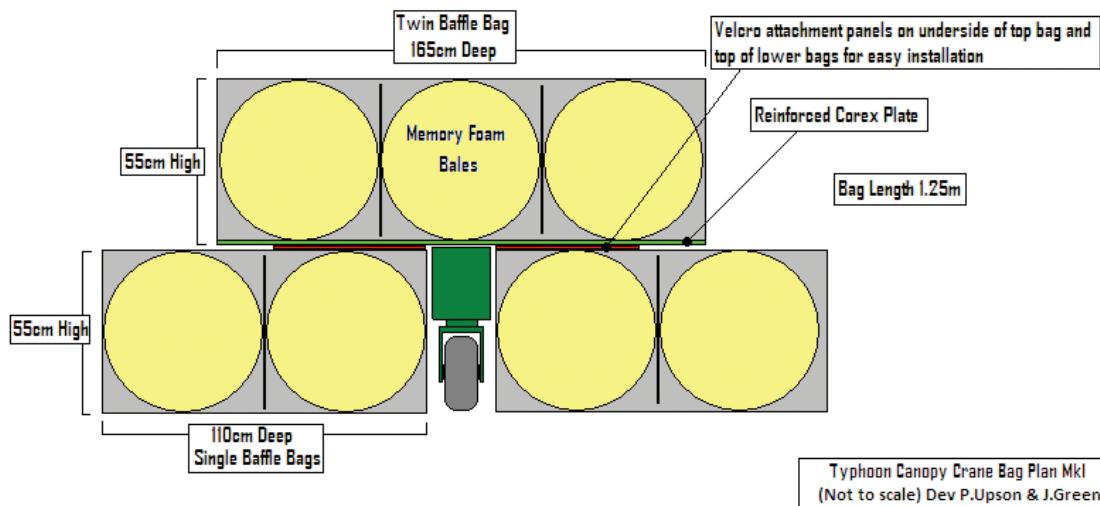
This allows us to create and develop the products in a Polypropylene material to the client's exact specifications, for pre-approval prior to manufacture in the appropriate compliant fabrics to confirm to the strict requirements within the end users environmental as imposed by our clients and M.O.D.



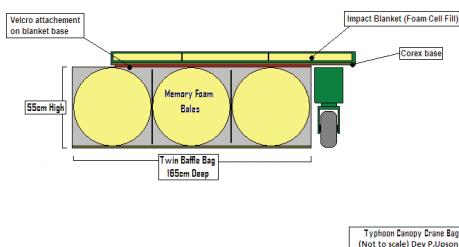
Aviation soft landing system

Bespoke product design & development

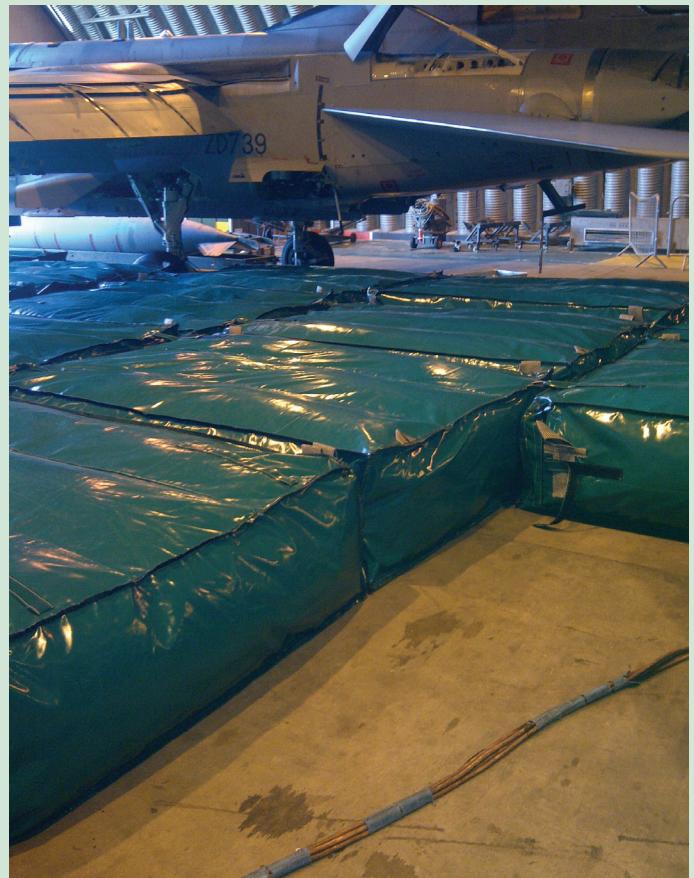
Soft Landing System
Cross Section



Soft Landing System
Cross Section



Initial design stages enable us to understand the application and then produce a product that can be utilised to maximum efficiency with minimum effort whilst adhering to and satisfying all required conformities.





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