



EASA
European Aviation Safety Agency



Personnel Carrying Device System (PCDS) an EASA update

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TE.GEN.00409-001



PCDS: What EASA does not regulate

2016



(Mountain)
Rescue



Customs
Firefighting

Police
Military
Coastguards





PCDS: What EASA regulates

2016



The rest...





PCDS: What EASA regulates

- **New Basic Regulation (Regulation (EU) 2018/1139)**
- **A Member State may decide to apply EASA regulations for**
 - military
 - customs
 - police
 - search and rescue
 - firefighting
 - border control
 - coastguard
 - similar activities undertaken in the public interest



- CM-CS-005 published in December 2014
- CM-CS-005 principles
 - Clear definition of « simple PCDS »
 - Approval of simple PCDS as Minor change
 - Reliance on EU standards
 - Directive (EC) 89/686/EEC (Personal Protective Equipment)
 - Directive (EC) 2006/42/EC (Machinery Directive)



Simple vs Complex PCDS

2016



SIMPLE



COMPLEX



- Future change in CS 27/29.865 and related advisory material
 - Introduction of “simple PCDS” definition in CS 27/29.865
 - Simple PCDS explicitly excluded from CS 27/29.865
 - Lead time 3-5 years?
- Change in Air OPS?
- Coordination with the FAA and TCCA



Next steps

➤ **new CS-27/29 Amendment 5, published 25 June 2018**

- rule removing simple PCDS from airworthiness
- acceptable means of compliance AMC No 3 to 27.865 introducing the material of the Cert Memo
- additional material on EN 1498 rescue loops/strops

➤ **CS-27/29 Amendment 6 ready to be published**

- remove material applicable only to the US
- adopt some of the new material from AC 27 Change 7
- additional material on hoist operator tethering

➤ **change in Air Ops ?**

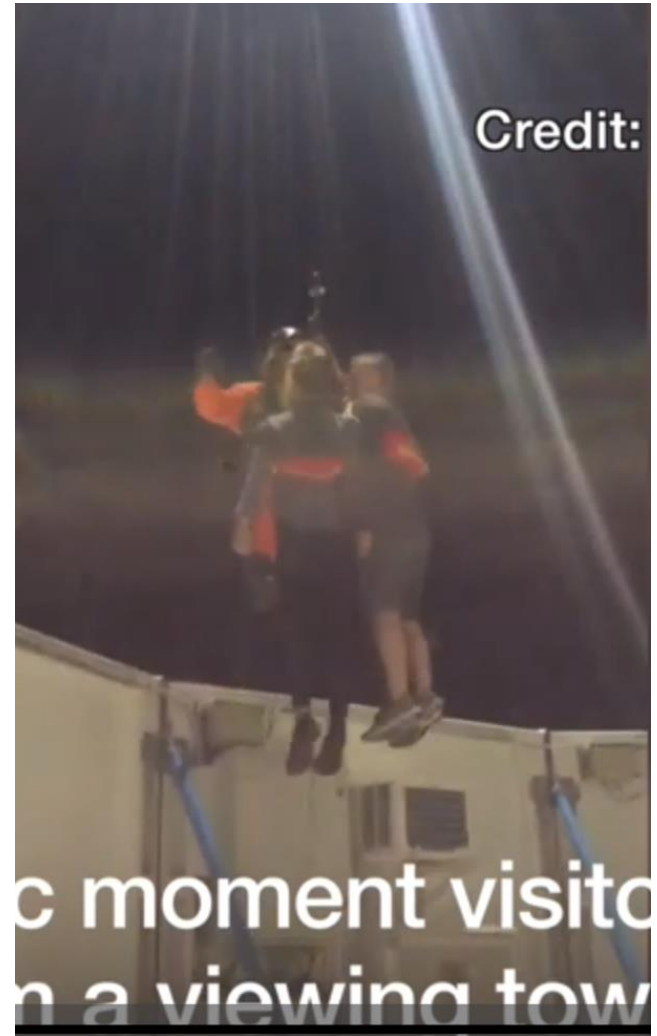


Rescue loops/strops

➤ <https://www.bbc.com/news/uk-england-dorset-41166593>



Garry Knight / flickr

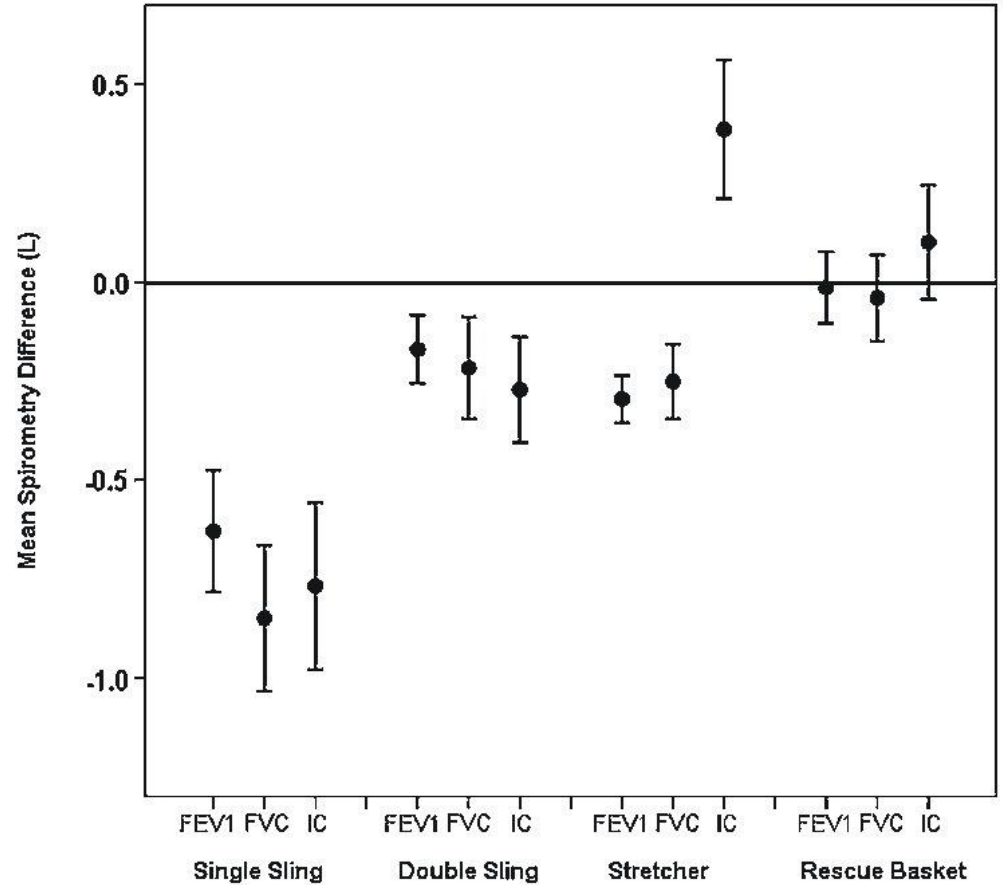
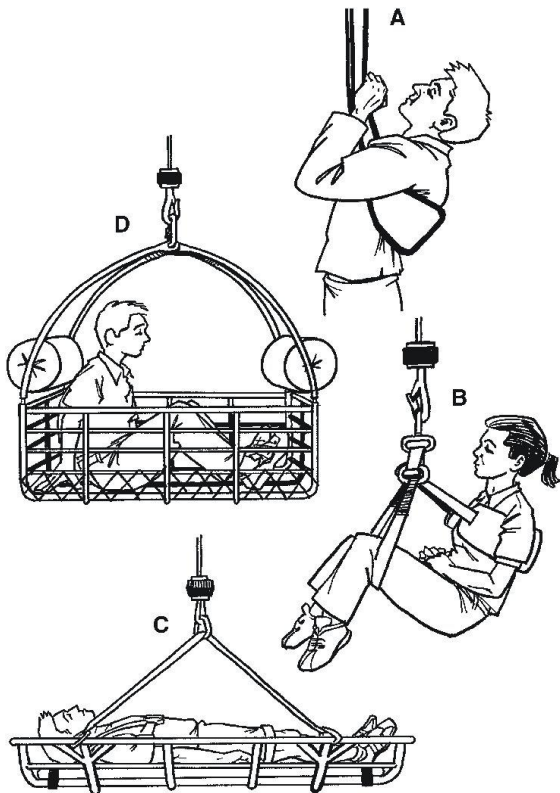


BBC



Rescue loops/strops

- ▶ 31.08.2013 Mansfield, Australia
Air Ambulance Victoria, Bell 412
ATSB AO-2013-136



“Respiratory Function in Hoist Rescue: Comparing Slings, Stretcher, and Rescue Basket”, David Murphy, Alan Garner, and Rod Bishop, *Aviation Space and Environmental Medicine*, 82(2):123-7 · February 2011



Rescue loops/strops

➤ Consider

- whether life is in imminent risk
- the physical condition of the person to be hoisted, particularly whether the rescuee will remain conscious and coherent during the hoist process
- the potential for the person to remain compliant with the brief given prior to hoisting
- alternative methods and devices to recover the person; and
- whether the risk of falling from the device would result in further serious injury or death.



Intended use

➤ EN standards need to be adapted for intended use, e.g. consider litter spin

➤ 15.03.1992 San Bernardino, CA, USA



https://youtu.be/msw31_dw7hE

➤ 09.12.1989 El Paso, TX, USA
US Army, UH-1V
in www.mra.org

- Thomson solid litter
- uncontrollable spin
- patient was ejected feet first



Helicopter compatibility

➤ e.g. dynamic rollout, even with double-locking hook

- CASA AWB 25-033, dated 9 July 2018
- EASA Safety Information Bulletin 2016-18R1 “Dynamic Rollout during Hoisting and/or External Sling Load Operations”, dated 18 July 2018



CASA



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Questions?

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