

HELICOPTERS

European Safety Promotion Network – Rotorcraft (ESPN-R) Hoist Operation

Alexander Weissenboeck, Airbus Helicopters
European Rotors Madrid - November 2023

AIRBUS

HELICOPTERS

...busy times 2022 & 2023...

....and more virtual meetings & workshops...

Workshop Leonardo Helicopters Sesto Calende/ IT November 2021



Collins User Conference March 2022 HAI Dallas/US



May 2022 PCDS Workshop KONG / IT



ICAR October 2022



Collins User Conference March 2023 HAI Atlanta/US



3rd DRF HHO Symposium September 2023



ICAR October 2023



1st DRF HHO Symposium September 2021



EUROPEAN ROTORS

November 2021



March 2022 PCDS Workshop Bergwacht Bad Tölz



2nd DRF HHO Symposium September 2022



EUROPEAN ROTORS

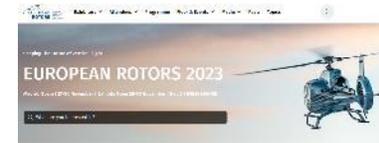
November 2022



May 2023

PCDS & Hoist Pilot Workshop

EUROPEAN ROTORS



November 2023



Reminder of Airbus Helicopters Safety Promotion Notice for Hoist Operations

AIRBUS HELICOPTERS No. 3195-P-00

SAFETY PROMOTION NOTICE

SUBJECT: GENERAL
ESPN-R Hoist Task Force recommendations

For the attention of 

AIRCRAFT CONCERNED	Version(s)	
	Civil	Military
EC120	B	
AS350	B, BA, BB, B1, B2, B3, D	L1
AS350		A2, C2, C3, L2
AS355	E, F, F1, F2, N, NP	
AS355		AF, AN, SN, UF, UN, AP
EC130	B4, T2	
SA330 / AS330	C1, C2, C3, N, N1, N2, N3	F, FA, FI, K, K2
AS355		MA, MB, SA, SE, UE, UE+
SA330		GA
EC155	B, B1	
SA330	J	Ba, L, Jm, S1, Sm
SA341	G	B, C, D, E, F, H
SA342	J	L, L1, M, M1, Mu
ALOUETTE II	313B, 3130, 318B, 318C, 318D	
ALOUETTE III	316B, 316C, 316D, 319B	
LAMA	319B	
EC225	LP	
EC725		AP
AS332	C, C1, L1, L2	B, B1, F1, M, M1
AS332		A2, U2, AC, AL, SC, UE, UL
EC175	B	
EC339		KUH/urion
BO105	C (C2), CB, CB-4, CB-5), D (DB, DBS, DB-4, DBS-4, DBS-5), S (CS, CBS, CBS-4, CBS-5), LS A-3	CBS-5 KUH, E-4
MBB-BK117	A-1, A-3, A-4, B-1, B-2, C-1, C-2, C-3a, D-2, D-3m	D-2m
EC135	T1, T2, T2+, T3, P1, P2, P3, ECSS T1, ECSS T2+, ECSS T3, ECSS P2+, ECSS P3, T3H, P3H, ECSS T3H, ECSS P3H	

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This document is available on the internet: www.airbus.com/hoist

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2.2 OPERATIONAL RECOMMENDED PRACTICES

Depending on whether the hoisting operations are performed by night or during the day, onshore or offshore, specific recommended practices & scenarios can be identified.

2.2.1 OFFSHORE HOISTING OPERATIONS

One of the specifics of offshore flight is usually laminar wind conditions. However, with the increasing use of large tankers or cruisers, specific risks need to be tackled.

2.2.1.1 Operating close to large vessels: 1 Cliff effect

Large vessels are an obstacle to laminar winds at sea and can generate dynamic updrafts and vortices, much like what can be encountered in mountain flying.
Risk identified: quick variations of dynamic updraft due to ship heading change or squalls from a different direction can induce significant height gain or loss.



Mitigation: strong awareness to this effect must be maintained

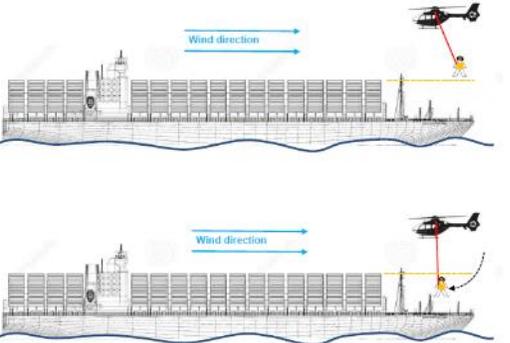
- by the pilot for choosing the hovering area, approach vector and the risk caused by obstacles in case of downdraft,
- by the hoist operator, to make sure that height variations do not occur with a hoist passenger close to the ship.

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Revision 1 2020-07-07 This document is available on the internet: www.airbus.com/hoist

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2.2.1.2 Operating close to large vessels: 2 Swing back effect

Large obstacles windward will "mask" the wind from the hoist passenger at some point on the way down.
Risk identified: No longer pushed by the wind, the hoist passenger will swing back to a position vertically below the helicopter.



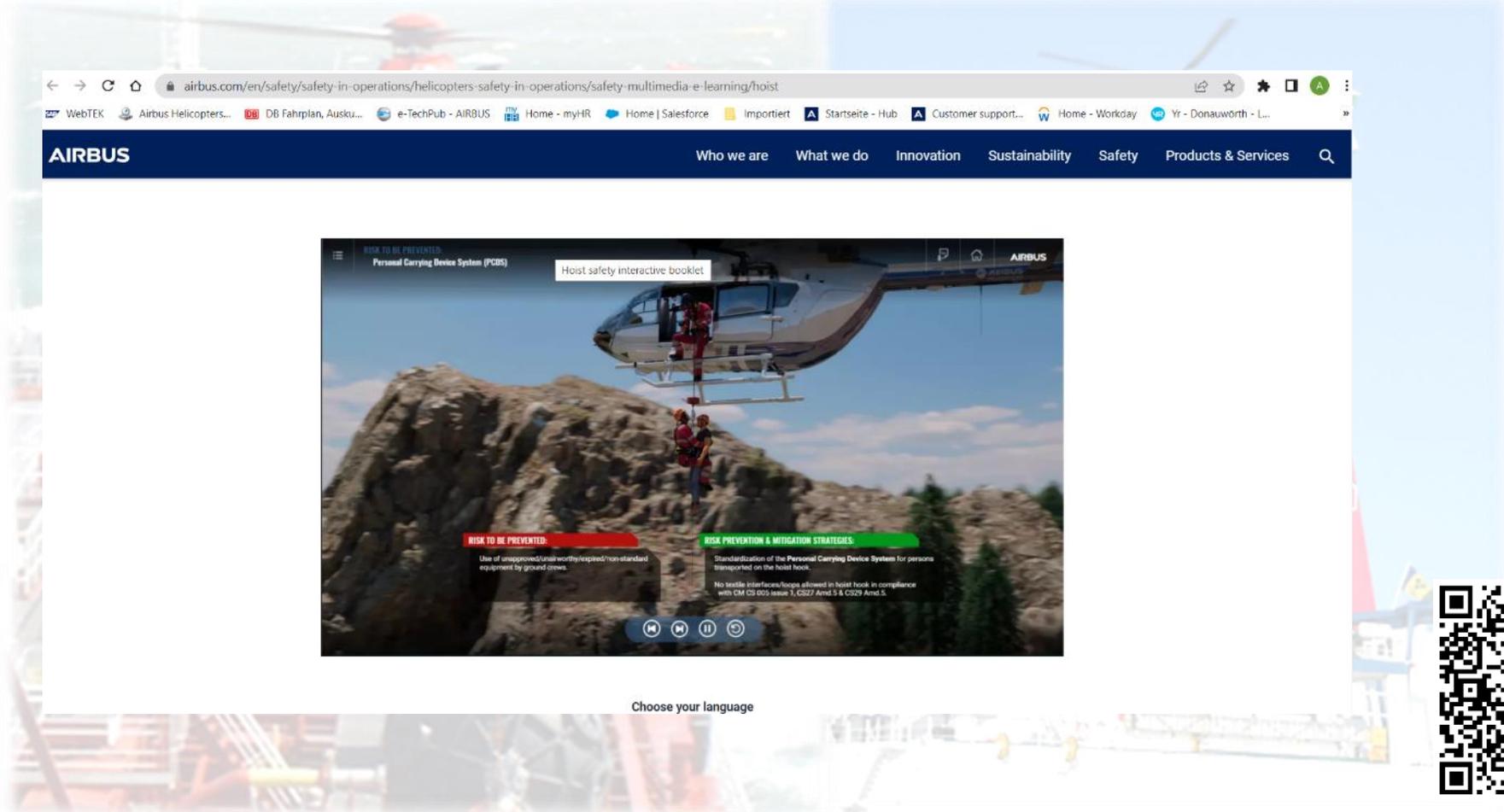
Risk mitigation: the hoist operator needs to anticipate this effect and adapt the approach vector and cable reeling speed accordingly.

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Revision 1 2020-07-07 This document is available on the internet: www.airbus.com/hoist



Notice (SPN) 3195-P-00-Rev-0-EN in September 2019 and revision in 2020 to also include e.g. off-shore hoisting operation information

Free Airbus hoist operations e-learning in multiple languages available



Based on Notice (SPN) 3195-P-00-Rev-1-EN, Airbus Helicopters developed an interactive FOC e-learning booklet to safely carry out your hoist operations while preventing and mitigating associated risks.

.... on August 29th, 2023 HeliOffshore referenced the ESPN-R Hoist Operator Training Guide in their **Wind Farm Recommended Practice (WinReP) V2**



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22 Annex 1 – Helicopter Hoist Operator Training, white paper 72

Link to HeliOffshore → [here](#)



....initial feedback on the ESPN-R Hoist Operator Training Guide, performed at Polizei Hubschrauber Squadadron Hessen by Stefan Timmermanns & Klaus Hopf



Hoist Pilot Training Guide

The aim of this upcoming training guide is to give a guideline for pilot training, based on the existing Regulation (EU) 965/2012 on air operations in order to clarify (but not limited to) training, checking and assignment into duties.

Considering the already existing EASA set of regulations the ESPN-R Hoist Operation Safety Promotion group suggests and recommends an effective and “modular” way to perform pilot education and training.

Recent Workshop – November 23/24, 2023
DRAFT version under review
DRAFT



DRAFT Guideline on PCDS for Helicopter Hoist Operations

- ❑ The intention of this document is to provide an overview regarding PCDS equipment set up and use to ensure proper and safe operations in H/C hoisting environments. This document provides guidelines for operators to define the configuration and use of PCDS.
- ❑ All PCDS in H/C hoist operations has to be in line with regulatory requirements covered with EASA CM no: CM-CS-005 Issue 01 / CS27 Amd.5 & CS29 Amd.5 Certification Memorandum Helicopter External Loads Personnel Carrying Device System and its internal referenced reference documentation. New issue to be respected

ESPN-R “Hoist Safety Promotion” does not aim to establish a new standard concerning PCDS for Hoist operation but has the scope to recommend a non exhaustive list of examples in order to provide guidance in the “equipment jungle”.

Recent Workshop – Friday Sept 8th, 2023
DRAFT version under review

DRAFT Whitepaper on Simulated Helicopter Hoist Operations

- ❑ Nowadays the **environmental and financial impacts of flight training** need to be contained more than ever **maintaining the highest standards** in order to always **improve safety and efficiency of operations**.
- ❑ Helicopter Cabin Crew and especially Hoist Operator still have to perform almost all their flight training on helicopter while **Pilots and Technicians are largely using simulated training solutions**.
- ❑ However, with the constant evolution of technology and also with Operators new mindset orientation **a new era is coming for Helicopter Hoist Operation**.

ESPN-R “Hoist Safety Promotion” does not aim to establish a standard concerning Hoist Operation simulated training but has the scope to recommend a structured approach in order to give credits to such activity.

DRAFT version under review

Simulated Helicopter Hoist Operations for ab-initio, advanced, recurrent, etc...



Crew to receive training in simulator or similar device can reproduce various kind of normal & emergency procedures



**European
Safety
Promotion
Network
Rotorcraft**

TO SERVE THE COMMUNITY

Disruptive Hoist-Pendant Concept

European Safety Promotion Network – Rotorcraft (ESPN-R) Hoist Operation

Stefan Timmermanns Police Helicopter Squadron Hessen

Sebastian Schneider DRF Stiftung Luftrettung gAG



Hoist-Pendant



simple

few properties

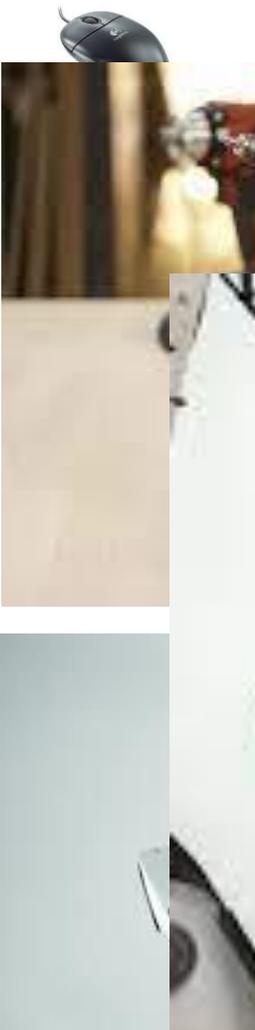
few operating functions



Example of incorrect handling of the Hoist-Pendant:



Ergonomic development in other fields



PAST



NOW



Flight Deck



PAST

NOW

From the point of view of ergonomics in 2023:

Continuous further development in terms of functionality and ergonomics

Call for feedback



Feedback whitepaper hoist
pendant



The screenshot shows a LinkedIn group page for "ESPN-R Hoist Operation Safety Promotion". The group is owned by Alexander Weissenboeck, who is also the Customer Support Manager (HEMS&Hoist) Europe. The group has 1,133 members, including Dr. Bettina Schleidt and 439 other connections. The page features a cover image of a hand holding a helicopter pendant, a pinned post by the owner about a feedback whitepaper, and a QR code for joining the group. The analytics section shows 95 active members (36% increase), 1 new member (67% decrease), 0 posts, and 445 post views (46% decrease).

Alexander Weissenboeck
Owner
Group created: Oct 2018

Pending posts: 0
Requests to join: 2

Manage group
Edit group

Recent

- ESPN-R Hoist Operation Safet...
- ESPN-R Sling Load Operations...
- European Safety Promotion N...
- Helicopter Parts & Services
- Kostenfreies Webinar: Faszinat...

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Media Poll

All Recommended

Pinned by admin

Alexander Weissenboeck · You
Customer Support Manager (HEMS&Hoist) Europe - Supporting strategic E...
1mo

During the 2023 DRF Hoist Symposium, Stefan Timmermans (Police Helicopter Sqd. Hessen) and Basti Schneider (DRF) presented the "Disruptive Helicopter Hoist Pendant Workshop" to gather feedback on existing pendants and sugges: ...see more

Feedback whitepaper hoist pendant

1,133 members
Including Dr. Bettina Schleidt and 439 other connections

Invite connections

Show all →

Analytics
Last 15 days activity

95 Active members	▲36%
1 New members	▼67%
0 Posts	
445 Post views	▼46%

Show all →

Admin

Alexander Weissenboeck · You Owner
Customer Support Manager (HEMS&Hoist) Europe - Supporting strategic European Airbus Helicopters HEMS and Hoist Operators

Groups you might be interested in



Join the LinkedIn ESPN-R Hoist Safety Promotion Community, link [here](#)



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Helicopter Safety Promotion Task Force - H-DRF HHO Symposium 19-21 Nov 2023

Thank you, for helping us to
increase safety on hoist
operations



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