



**together
4safety**



EUROPEAN ROTORS EASA Rotorcraft & VTOL Symposium

**ESPN-R Safety Promotion Workshop
9 Nov. 2022, 15:00-17:00**

EASA Safety Promotion Head
John Franklin, EASA

ESPN-R Coordinators
Michel Masson, EASA
Bernd Osswald, Airbus Helicopters
Joost Vreeken, NLR Advisory

Introducing the new 3rd ESPN-R Coordinator



Joost Vreeken, NLR

MBA, BEng, NLR Program Lead 'Unmanned and Autonomous'

R.COM and ESPN-R ST Technology Lead

1. VAST and the power of collaborating at global level

First – an Important Question

**Where can I
get a picture
of a roller-
skating
mermaid?**



Some people get dressed up



Some get less dressed up



Young and Old



Dancing in the Sea



It's not about the Pictures - Obviously



It's about where they came from – the power of collaboration

- 152,485 photos
- From over 5,000 people in over 50 countries
- When we work together amazing things happen
- This is really the power of VAST



About Us



Enabling Safety Collaboration for The Global VTOL Industry

- A public–private initiative to enhance worldwide flight operations safety in all segments of the vertical flight industry.
- Members include international safety teams, safety authorities, and other stakeholders seeking to elevate VTOL safety.
- More information at vast.aero/about-vast



What's New?



Name – Scope - Approach

- The International Helicopter Safety Foundation rebranded as the Vertical Aviation Safety Team (VAST)
- VAST expanded public-private partnerships to **all segments** of the worldwide vertical flight industry.
- Using a data-informed, consensus-based approach, VAST will integrate and globally distribute valued safety data and proven risk reduction strategies.



Evolution of the VAST



Commercial Aviation Safety Team (CAST) established, with goal of reducing airline accidents by 80% in 10 years

IHST is recalibrated with a vision of zero accidents; regional safety teams, including the US Helicopter Safety Team (USHST), established

1997

2006

2013

2021

International Helicopter Safety Team (IHST) created with similar goal

Expanded and rebranded as the Vertical Aviation Safety Team (VAST)

Why the VAST?



Understanding our legacy challenges

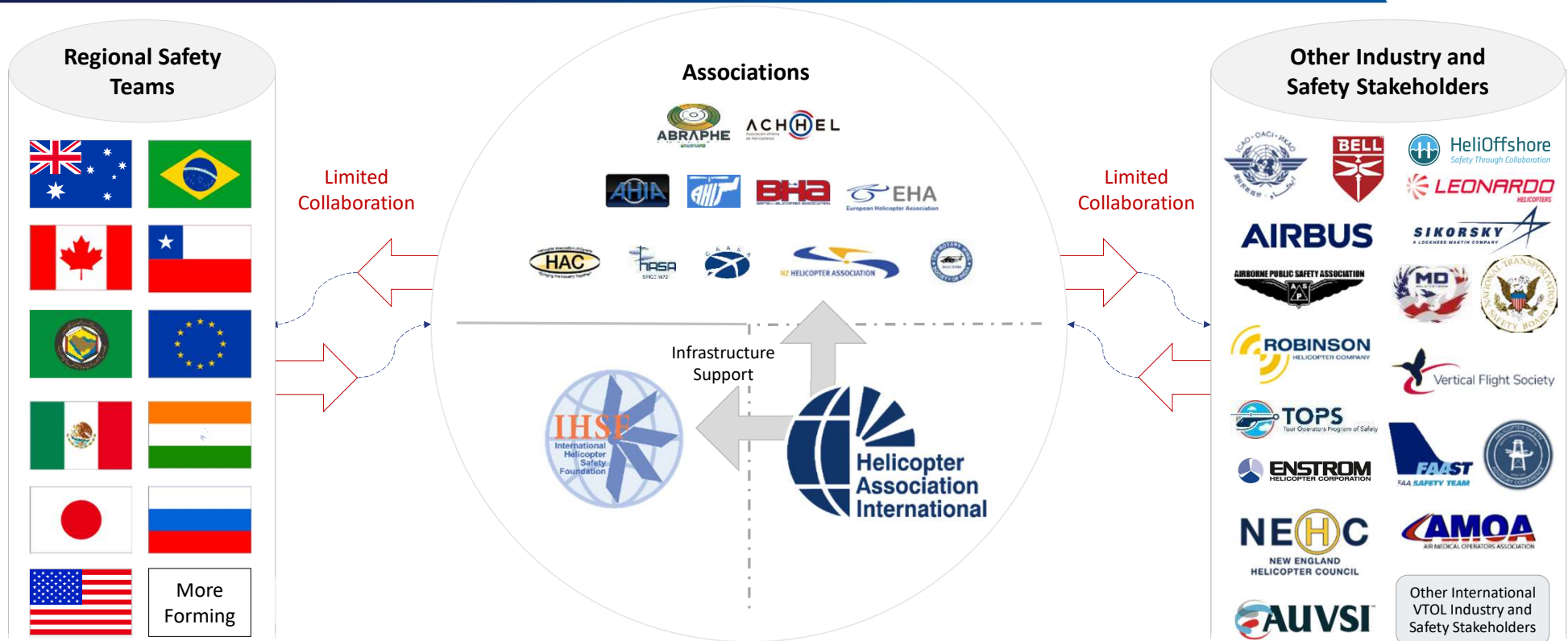
The international vertical flight industry benefitted from regional safety teams and others focused on developing safety resources to reduce the likelihood and severity of accidents.

however...

Collaboration and coordination of those resources was limited or nonexistent.



Legacy State – Limited Coordination



Siloed, redundant, or conflicting safety initiatives. No unified or harmonized effort to exchange valuable safety information.

Interim State – Remove Silos



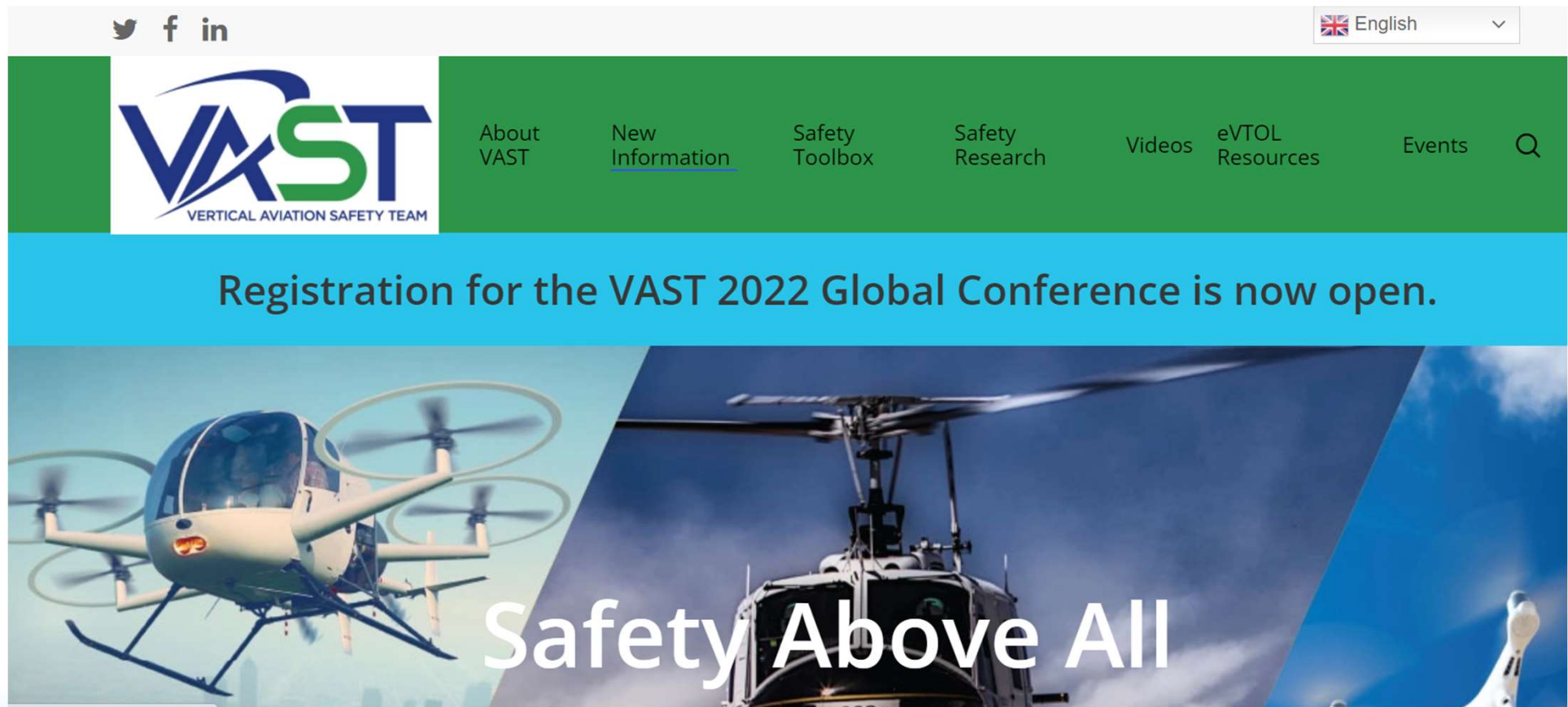
Our Objective State



The Open
Exchange of
Timely,
Relevant, and
Harmonized
Global VTOL
Safety Data



Safety Resource Library Now Available!



What's Next?

As Vertical Aviation Evolves..

- Expand awareness, recruitment, and engagement of the VAST
- Identify mutual interests of all stakeholders
- Share content to enhance global VTOL safety
- Are you ready to be a part of it?





HELP ELEVATE GLOBAL VTOL SAFETY

Individuals Join your regional safety team

<https://vast.aero/regional-safety-teams/>

Organizations Take the VAST Pledge

<https://vast.aero/join-the-vast/>

info@vast.aero

www.vast.aero


2. ESPN-R Communication Platforms and Deliverables

LinkedIn ESPN-R Groups

All subjects


Andy Evans • 1st
Director - Aerossurance: Aviation advisors helping companies and public bod...
1d

<https://lnkd.in/erzKqCA8> #offshorehelicopter #helicopter #offshoreenergy #flightsafety #aviationsafety

HeliOffshore Ltd
4,885 followers
1d • 

HeliOffshore has today published its fourth annual Industry Safety Performance Report with figures for 2021.

...see more




HeliOffshore releases annual offshore aviation industry safety report for 2021 — HeliOffshore
helioffshore.org • 2 min read

> 3050 Members

Hoist Ops


Eva Wang • 3rd+
Clad Pipe,SCM440 42CrMo4 Pipe,Grayloc G-lok Clamp Connector,Explosion ...
1mo — PESCO Smart Ascender for Rope Access
<https://lnkd.in/gNsjq-ct>




0:16

> 1050 Members

Sling Load Ops

Brendan F. • 2nd
Business Development Manager at Onboard Systems
[+ Follow](#) 

1mo — One more thing you can carry as external load and another way helicopter external load can save lives.



Search and rescue may have become much easier in Southwest Colorado with new technology
the-journal.com • 9 min read

> 200 Members



Rotorcraft

Public community • 5035 members

Join

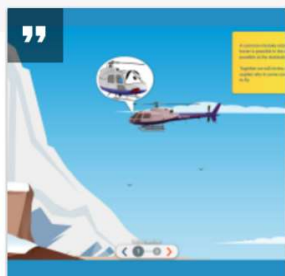
RSS



Vortex Ring State - VRASF Teaser and Video, Sep. 2022

27 Sep 2022 • Michel Masson

[Read more](#)



Helicopter Performance, Vortex, Servo Transparency and Recoverable Unanticipated Yaw

26 Sep 2022 • Michel Masson

[Read more](#)



HeliOffshore Unexpected Events Pilot Monitoring Research

3. ESPN-R Teams and Task Forces

5 Teams for Leverage in Focus Areas

ESPN-R Team Training

Lead: mathieu.vandenavenne@safety4flight.com

Training

ESPN-R Team Ops & SMS

Lead: sburigana@elilombarda.com

Ops & SMS

ESPN-R Team Technology

Lead: Jost.Vreeken@nlr.nl

Tech

ESPN-R Task Force Hoist Safety Promotion

Lead: alexander.weissenboeck@airbus.com

Hoist

ESPN-R Task Force Sling Load Safety Promotion

Lead: michael.behrens@airbus.com

Sling Load

ESPN-R Training Team

Led by **Mathieu Vendenavenne**, Safety for Flight
mathieu.vendenavenne@safety4flight.com

Revision of the EASA Examiner's Manual (FEM)

WG led by Leonardo:

- 4 modules (LAPL, PPL, CPL and ATPL) adapted by Leonardo under review,
- 6 modules (MPL, IR, TR, SFI, FI, Examiner) to be adapted,
- Module for TRI is TBD.

[Home](#) / [Document Library](#) / [Publications](#) / [General publications](#) / [Flight Examiners' Manual \(FEM\)](#)

Flight Examiners' Manual (FEM)

📅 02 Nov 2021

Publication type: [Safety Promotion](#)

Publication Date: 02/11/2021

Safety Promotion Publication Type: [Aircrew and Medical](#)

Safety Promotion Product Type: [Commercial Air Transport](#)

EASA's Flight Examiner Manual (FEM) provides a reference companion to the Examiner standardisation requirements and guidance as set out in the Aircrew Regulation ([Commission Regulation \(EU\) no 1178/2011](#)).

The manual contains 15 documents and covers the full range of licenses and rating, helps to explain the contents of the Aircrew Regulation and gives standardisation and best practice guidance to examiners for the conduct of tests.



ESPN-R Training Team Highlights

Led by Jan Loncke, EASA

New version of the EASA Helicopter Flight Instructor Guide

Objective: Make a stronger link with the Rotorcraft Safety

Roadmap, esp. Work Streams Training Safety and Training Devices.

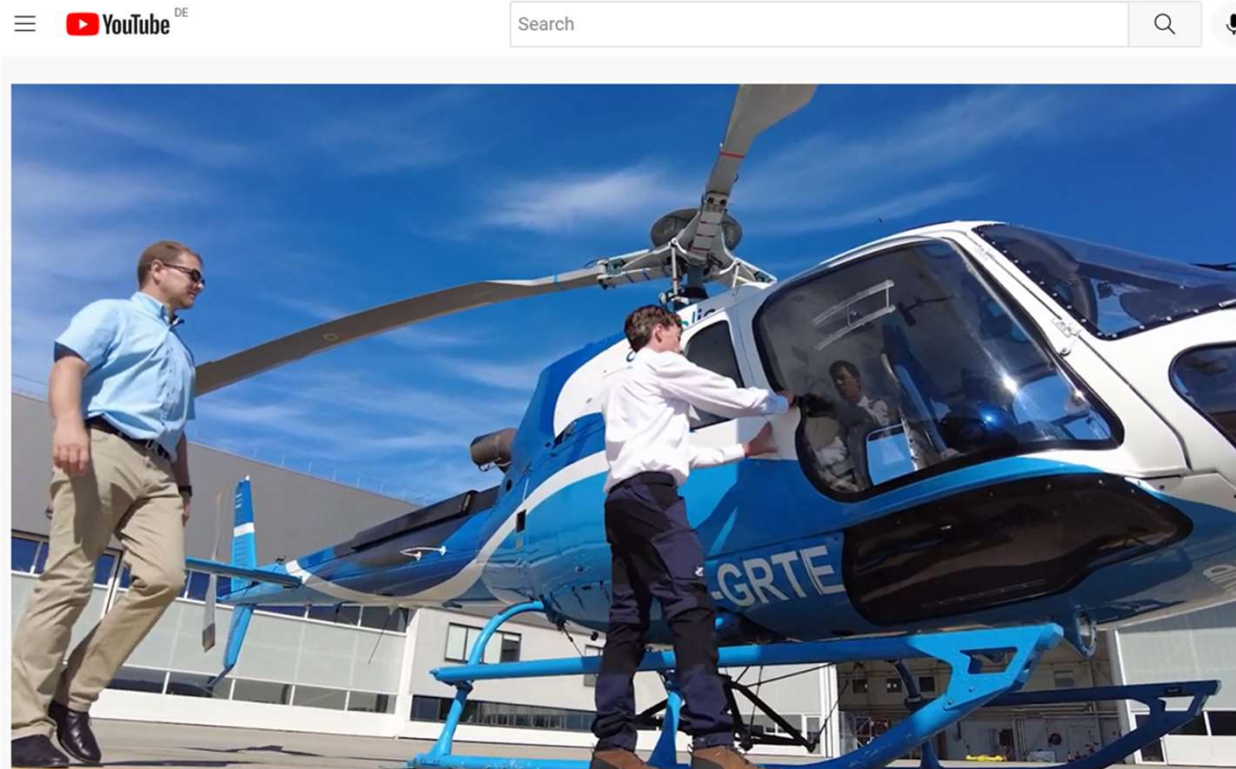
Multiple improvements including:

- Training scenarios and use of non-conventional training devices,
- Experience level of flight instructors,
- More TEM elements in several exercises, and
- Elaboration on VRS including Vuichard Recovery, and shift from LTE to UY



<https://www.easa.europa.eu/community/topics/easa-helicopter-flight-instructor-guide-new-v4-june-2022>

ESPN-R Training Team Highlights



<https://youtu.be/0GB-S617LDg>

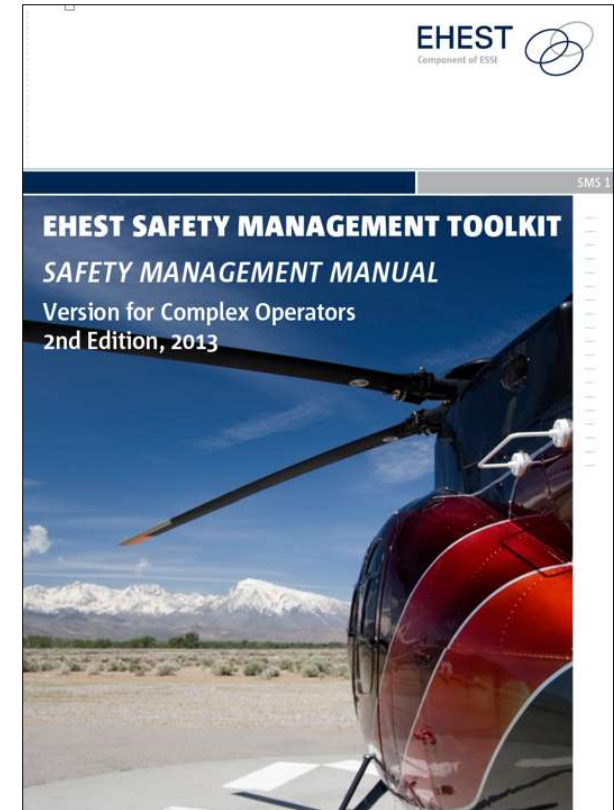
ESPN-R Ops & SMS Team

Led by **Stefano Burigana**, Elilombarda

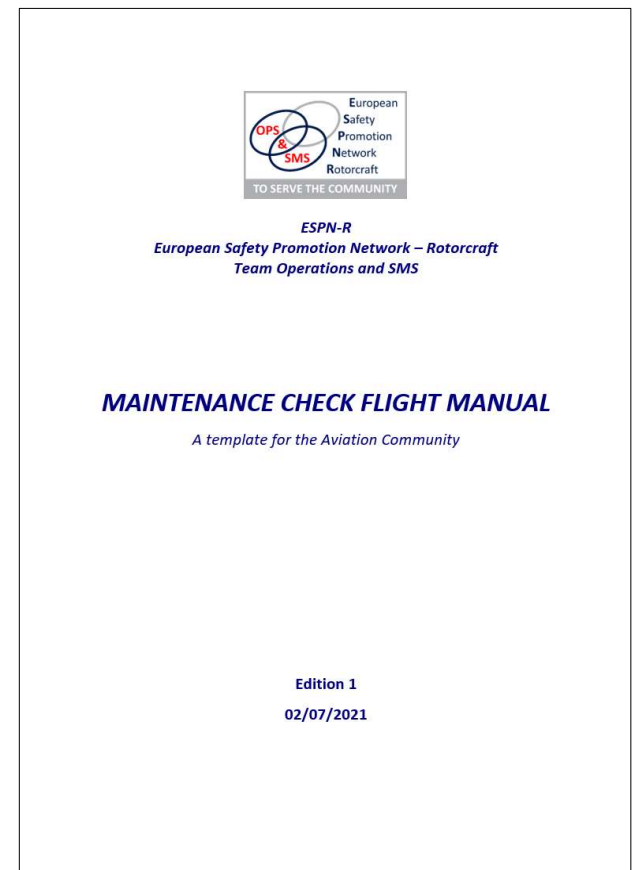
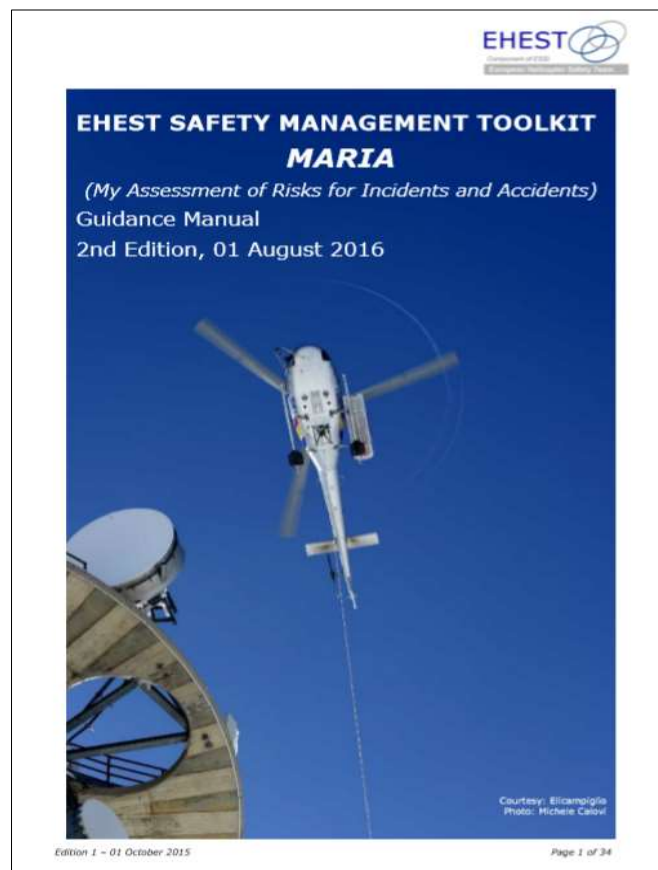
sburigana@elilombarda.com

Revision of the ESPN-R Management System Manual (Safety + Compliance Monitoring)

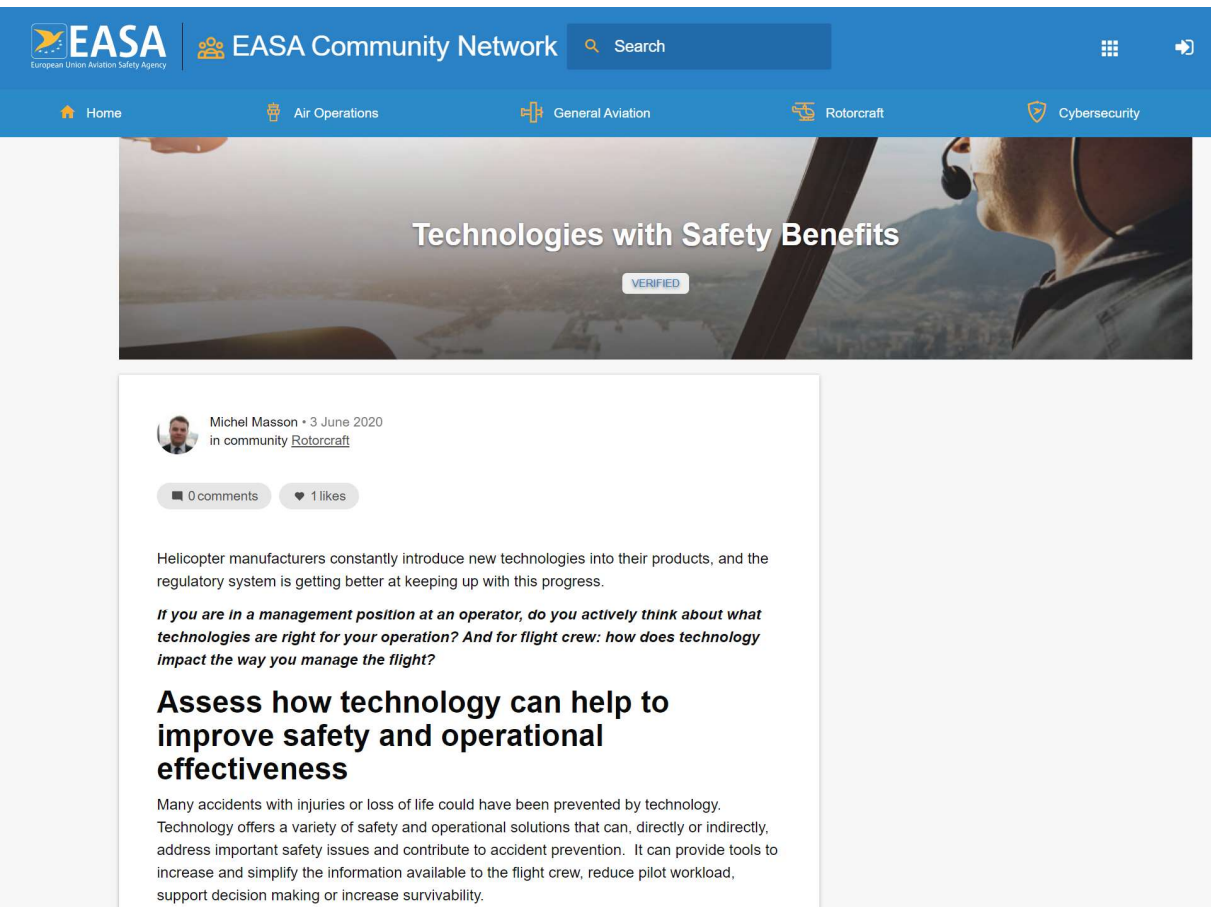
Objective: align to latest ICAO Safety Management provisions.



ESPN-R Ops & SMS Team Highlights



ESPN-R Technology Team and Highlights



The screenshot shows the EASA Community Network interface. At the top is the EASA logo and a search bar. Below the navigation bar, a banner image of a pilot in a cockpit is displayed with the text "Technologies with Safety Benefits" and a "VERIFIED" badge. A post by Michel Masson, dated 3 June 2020, is visible. The post discusses helicopter manufacturers introducing new technologies and the regulatory system's progress. It includes a question for operators and flight crew about the impact of technology on flight management. The post title is "Assess how technology can help to improve safety and operational effectiveness". The post content mentions that many accidents could have been prevented by technology and that it offers various safety and operational solutions.

EASA Community Network

Home Air Operations General Aviation Rotorcraft Cybersecurity

Technologies with Safety Benefits

VERIFIED

Michel Masson • 3 June 2020
in community Rotorcraft

0 comments 1 likes

Helicopter manufacturers constantly introduce new technologies into their products, and the regulatory system is getting better at keeping up with this progress.

If you are in a management position at an operator, do you actively think about what technologies are right for your operation? And for flight crew: how does technology impact the way you manage the flight?

Assess how technology can help to improve safety and operational effectiveness

Many accidents with injuries or loss of life could have been prevented by technology. Technology offers a variety of safety and operational solutions that can, directly or indirectly, address important safety issues and contribute to accident prevention. It can provide tools to increase and simplify the information available to the flight crew, reduce pilot workload, support decision making or increase survivability.

Led by **Joost Vreeken**, NLR

joost.vreeken@nlr.nl

Identifying, assessing and promoting technologies with safety benefit

Contributing to the VAST Technology WG, led by Mike Hirschberg, VFS

hirschberg@vtol.org

[Technologies with Safety Benefits | EASA Community \(europa.eu\)](https://europe.eu/Technologies-with-Safety-Benefits)

ESPN-R Hoist Ops SP Task Force

Led by **Alexander Weissenboeck**, Airbus Helicopters

alexander.weissenboeck@airbus.com

Workshops on March 24-25 to mature the **Pilot Training Guide for HHO** (cf. Hoist Operators Training Guide).

Location: Bavarian Mountain Rescue Center Bad Tölz,
with access to training equipment, e.g. hoist trainer.

Attendees: OEM training pilots and operational units pilots
(police, EMS, mountain rescue, windfarm and harbour piloting
mission segments) from all over Europe.



ESPN-R Hoist Ops SP Task Force Highlights

ESPN-R HOIST OPERATOR TRAINING GUIDE V1.0 Date 04.02.2021

European
Safety
Promotion
Network
Rotorcraft
TO SERVE THE COMMUNITY

FEBRUARY 4, 2021

together
4safety

ESPN-R HOIST SAFETY PROMOTION

HOIST OPERATOR TRAINING GUIDE V1.0 FEBRUARY 04, 2021




Foto credit by REGA


ESPN-R HOIST SAFETY PROMOTION WORKING GROUP

1

YouTube DE

Search

Hoist Tools and Ground Support Equipment



Dedicated ground support equipment (GSE/AGE) shall be available by the OEM to ensure correct application of maintenance procedures.

37

17 November, 2021

2:21 / 26:23

ESPN-R Session: Part II, with Hoist Workshop - Rotorcraft and VTOL Symposium 2021 - Day 2

19 views • Nov 25, 2021

0 DISLIKE SHARE SAVE ...

<https://www.easa.europa.eu/community/topics/espn-r-together4safety-helicopter-hoist-operator-training-guide>

ESPN-R Sling Load Ops SP Task Force

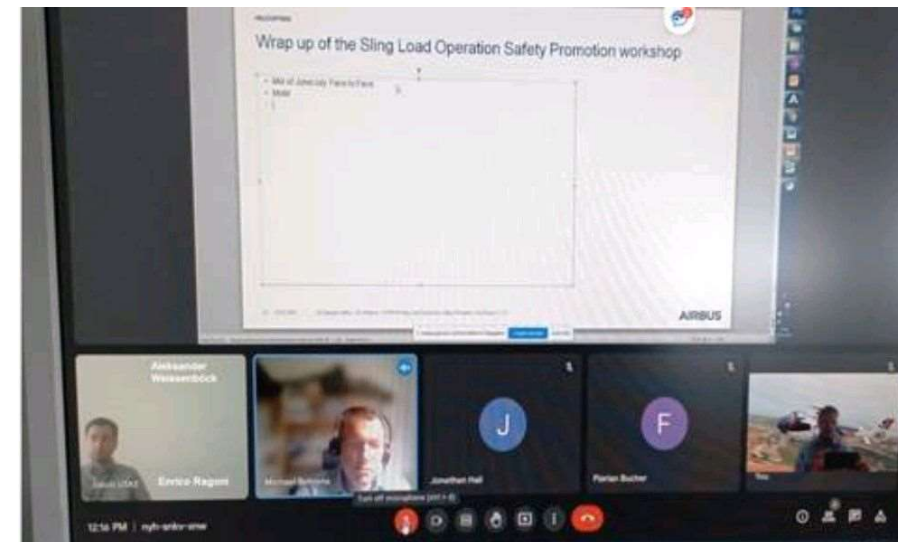
Led by **Michael Behrens**, Airbus

michael.behrens@airbus.com

Promotion Material on High-Profile Helicopter Issues

2nd (follow-up) Workshop performed virtually on March 29 to establish a **Best Practices Equipment User Guide** (mission related) and to clarify pros and cons of using various equipment by evaluating all market-available items.

Jonathan HALL – EASA
Klaus Hopf - Bavarian Helicopter Police Squadron
Florian Bucher – ÖAMTC
Patrick Fauchère - Air Glaciers SA
Benno Seeholzer - Heliswiss
Enrico Ragoni - AirWork & Heliseilerei GmbH (A&H)
Julien Eymard – LEONARDO HELICOPTERS
Bernd Osswald – AIRBUS HELICOPTERS
Alexander Weissenboeck - AIRBUS HELICOPTERS
Michael Behrens - AIRBUS HELICOPTERS



ESPN-R Sling Load Ops SP Task Force Highlights



ESPN-R Sling Load Operations Safety Promotion

Private group

> 200 Members



Michael Behrens • 2nd

Expert for Human & Non-Human External Cargo b...
1mo

+ Follow ...

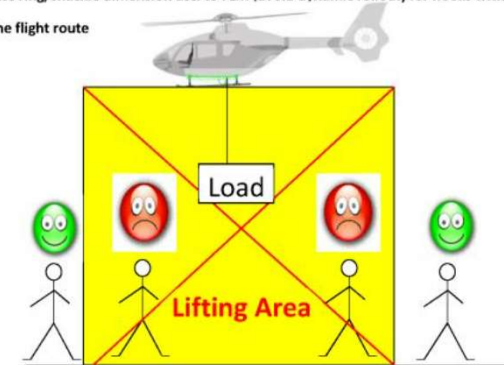
Dear members of

ESPN-R Sling Load Operations Safety Promotion

...see more

Working under a hovering H/C

- Task Specialist should where possible leave the lifting area before the load is airborne (tension on rope)
- Limit the persons in affected area to those strictly necessary to perform the operation
- Perform a risk assessment before the operation
- Briefing and De-Briefing including third parties
- Locked/Unlocked indication should be requested by the remote hook supplier
- Keeperless design or appropriate ring/shackle dimension acc. to FLM (avoid dynamic rollout) for hooks with keeper
- Avoid populated areas along the flight route



[\(36\) ESPN-R Sling Load Operations Safety Promotion | Groups | LinkedIn](#)

4. Events



The biggest General Aviation show in Europe returned on April, 27 – 30, after two cancelled editions.

Aero 2022 highlighted innovations in hydrogen and electric powered aircraft. Airplanes, VTOL, Gliders, Drones and Helicopters.

Sustainable fuels and digital systems to support pilots.

Participation of EASA and ESPN-R.



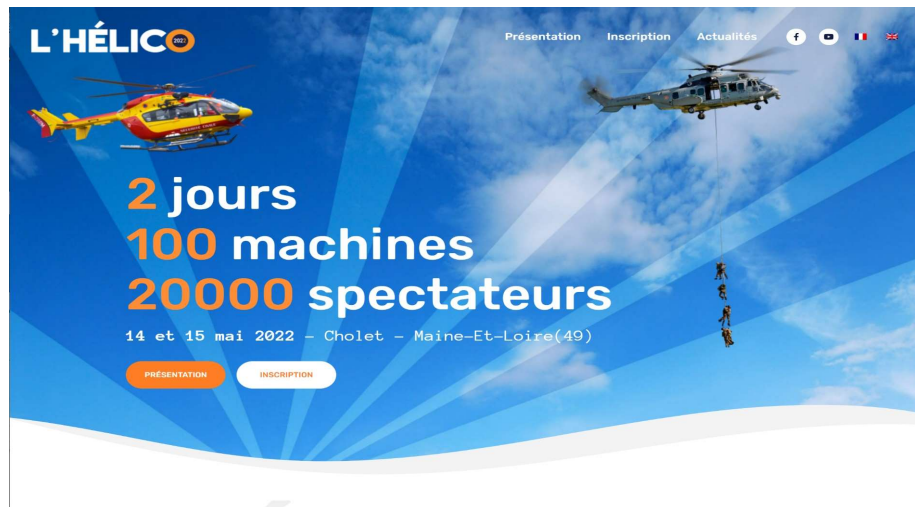
2nd HHO Symposium

The DRF Luftrettung will host the 2nd HHO Symposium from 7th – 8th September 2022 at the Operation Center at Baden Airpark (EDSB). The objective of the event is to establish an expert platform for Helicopter Hoist Operators in Europe in order to increase safety, quality standards and innovation.

2nd HHO Symposium, Sept., 7–8, Operation Center at Baden Airpark.

The objective is to establish an expert platform for Helicopter Hoist Operators in Europe to increase safety, quality standards and innovation.

The main Symposium's topic is Crew coordination in helicopter hoist operation.



Participation of Jim Viola, HAI President and CEO and Jeff Smith, HAI Vice President, Christian Muller, EHA Chair, Pierre-Olivier, UFH co-President, David Solar, Head of Department General Aviation and VTOL, EASA, Isabella Abbate, EHA Director and Thierry Couderc, UFH Deputy Chief Executive Officer, and EHA Vice Chair.

Jim Viola visited Airbus Helicopters in Marseille (Bernd Osswald provided an ESPN-R briefing).



VAST hosted the 2022 Global Vertical Aviation Safety Conference from October 4-6 in Dallas (no conference fees).

The first day featured presentations designed for pilots, mechanics, manufacturers, modifiers, engineers, students, and government and industry employees and executives.

The second day addressed Operations, Maintenance, and Advanced VTOL.

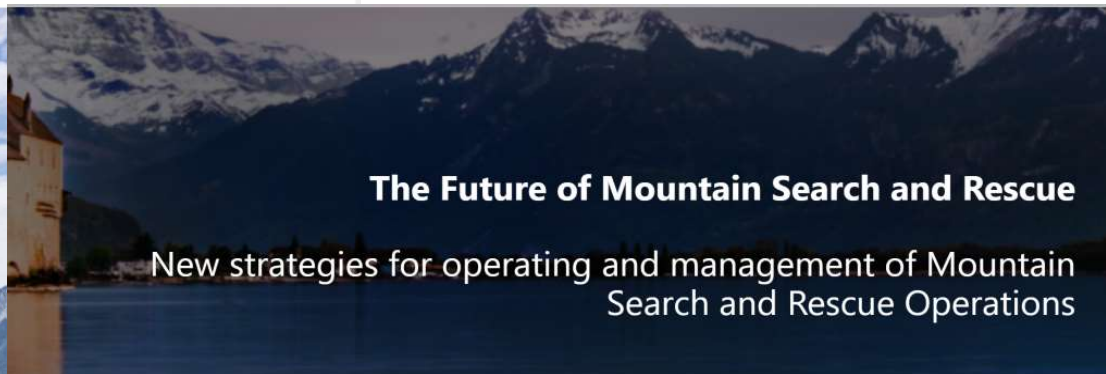
The third addressed safety, technology and vertiports.



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Local information

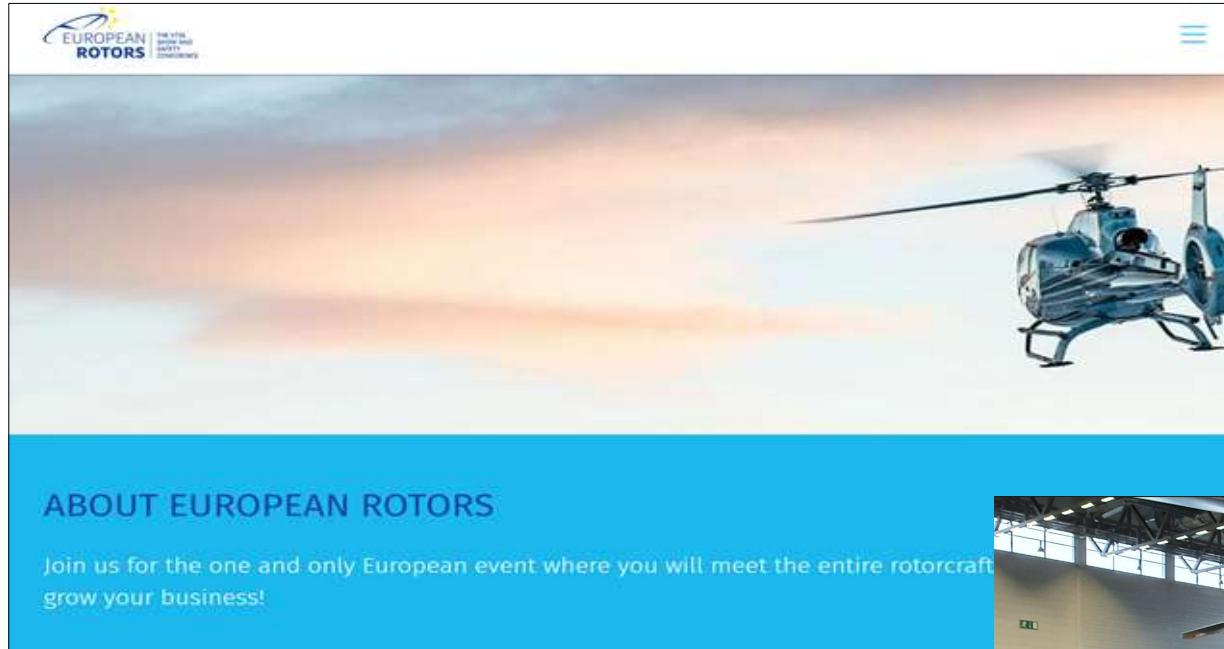


The Future of Mountain Search and Rescue

New strategies for operating and management of Mountain Search and Rescue Operations

October 12th to 15th 2022

The International Commission for Alpine Rescue ICAR, is a not for profit NGO set up with the prime purpose of ensuring best practice in mountain rescue techniques.



Hoist Operation Demos in the Exhibition Hall
Safety Zone in the Exhibition Hall
ESPN-R Safety Promotion Workshop



5. What's Next?

**Increasing our collaboration
and getting your input**



Rotorcraft Safety

Building a solid foundation for the future so that you can focus on ensuring safe and effective operations every day.

Purpose

The ability to create and maintain the capacity to enable safe and effective operations
- if things change so must you.



Be Ready.



Culture

Defining and living by the values that creates the trust needed to support positive safety conversations.



People

Having enough qualified, competent and skilled people who are operationally ready and fit for duty.



Resources

Ensuring that helicopters are ready and that you have the right tools, equipment and infrastructure in place



Stay Safe



Comply

Encouraging people to do things the right way by following the relevant processes, procedures and practices.



Risk

Knowing your risks and mitigating them effectively as part of a resilient management system.



Learn

Inspire your teams to talk about safety and then having a positive approach to learning and solving problems.

6. ESPN-R Workshop Topic of the Year

Inadvertent Entry Into IMC (IIMC)

Questions?

SafetyPromotion@easa.europa.eu