

IHST - EHEST Safety Workshop

13 Oct

Dissemination of Educational Material



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Secretary

Your safety is our mission.

1. **European Helicopter Safety Implementation Teams (EHSIT) ST Training**
2. **Analysis**
3. **From analysis to action – Leaflets**
4. **From analysis to action – Videos**
5. **EHEST website**

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European Helicopter Safety Team (EHEST)



Commercial Aviation Safety Team

ECAST

Component of ESSI

European Commercial Aviation Safety Team

Helicopter Safety Team

EHEST

Component of ESSI

European Helicopter Safety Team

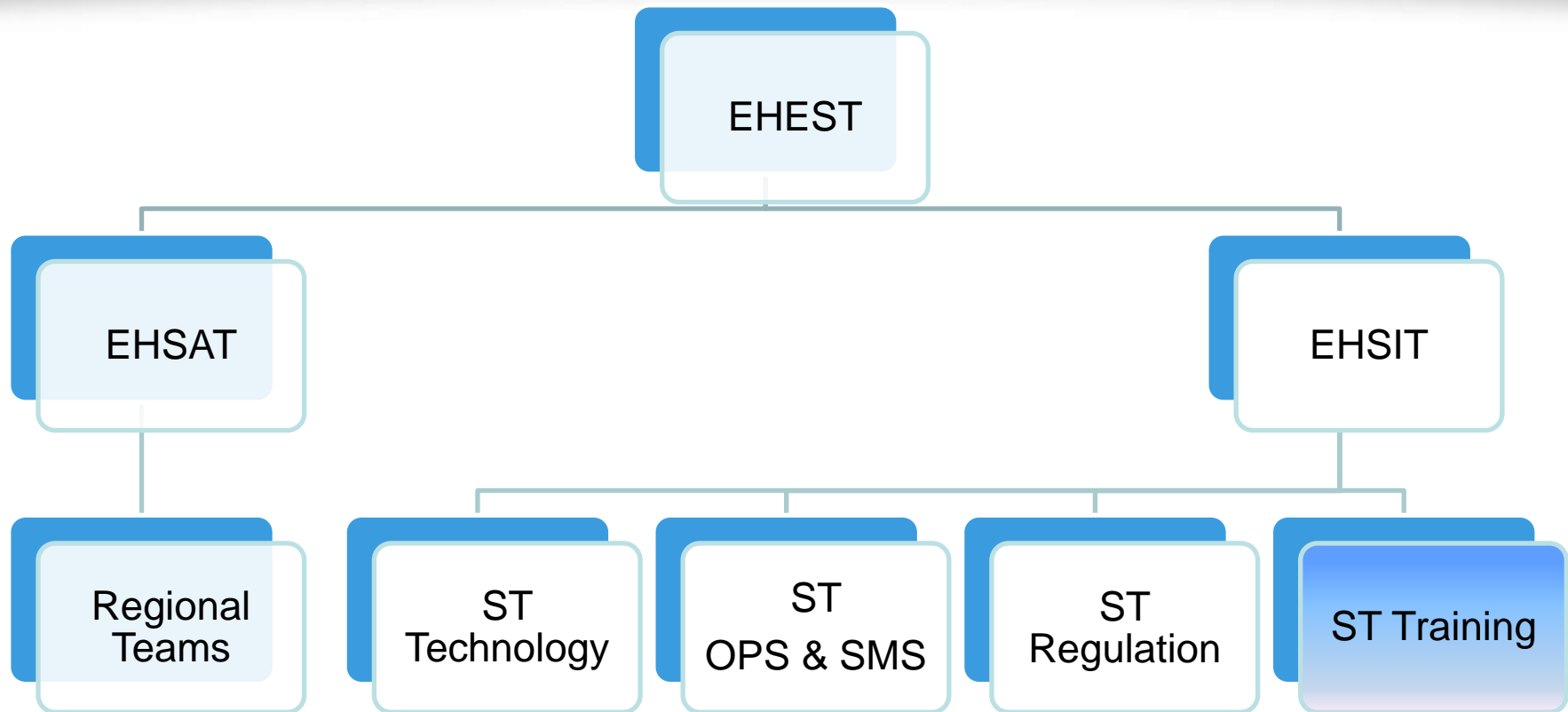
General Aviation Safety Team

EGAST

Component of ESSI

European General Aviation Safety Team

EHEST Structure



ST Training

Tasked to process the Implementation Recommendations (IRs) **related to Training** aggregated on the basis of the European Helicopter Safety Analysis Team (EHSAT) work.



Leaflets, Videos, Guides





Life Is On



THALES

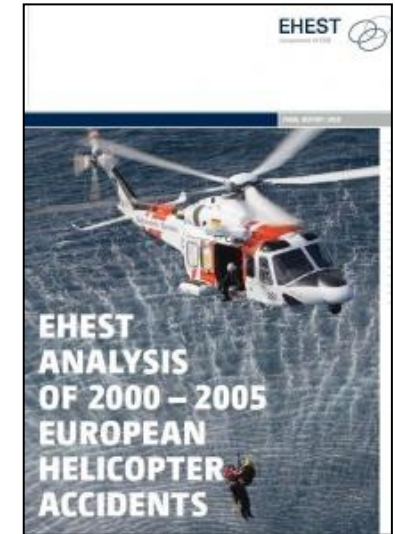


EHSIT ST- Training components

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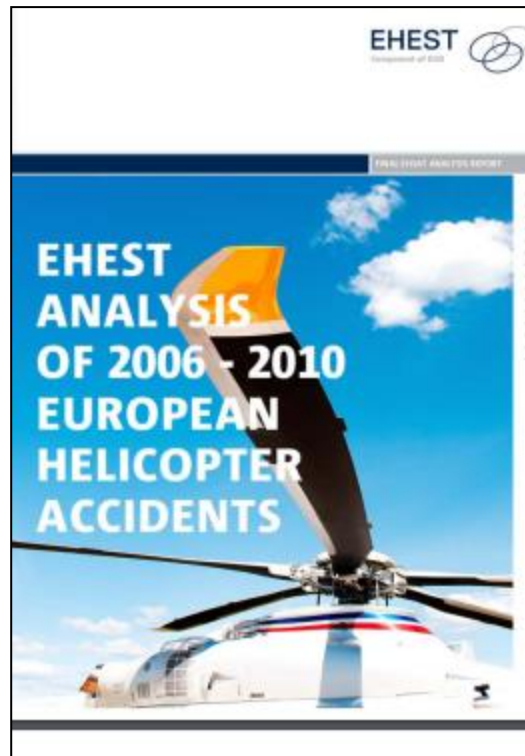
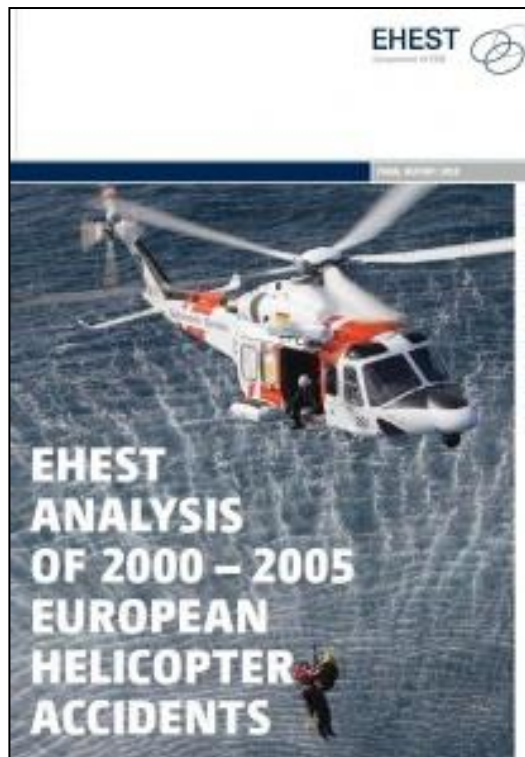
Analysis (Source EHEST Report)

- EHSAT analysis
 - 1st Final report published in 2010 with a total of 325 accidents related the period 2000-2005
 - 2nd Final report published in 2015 with a total of 162 accidents related the period 2006-2010



EHEST Analysis Reports

- 2000-2005: 325 accidents analysed
- 2006-2010: 162 accidents analysed

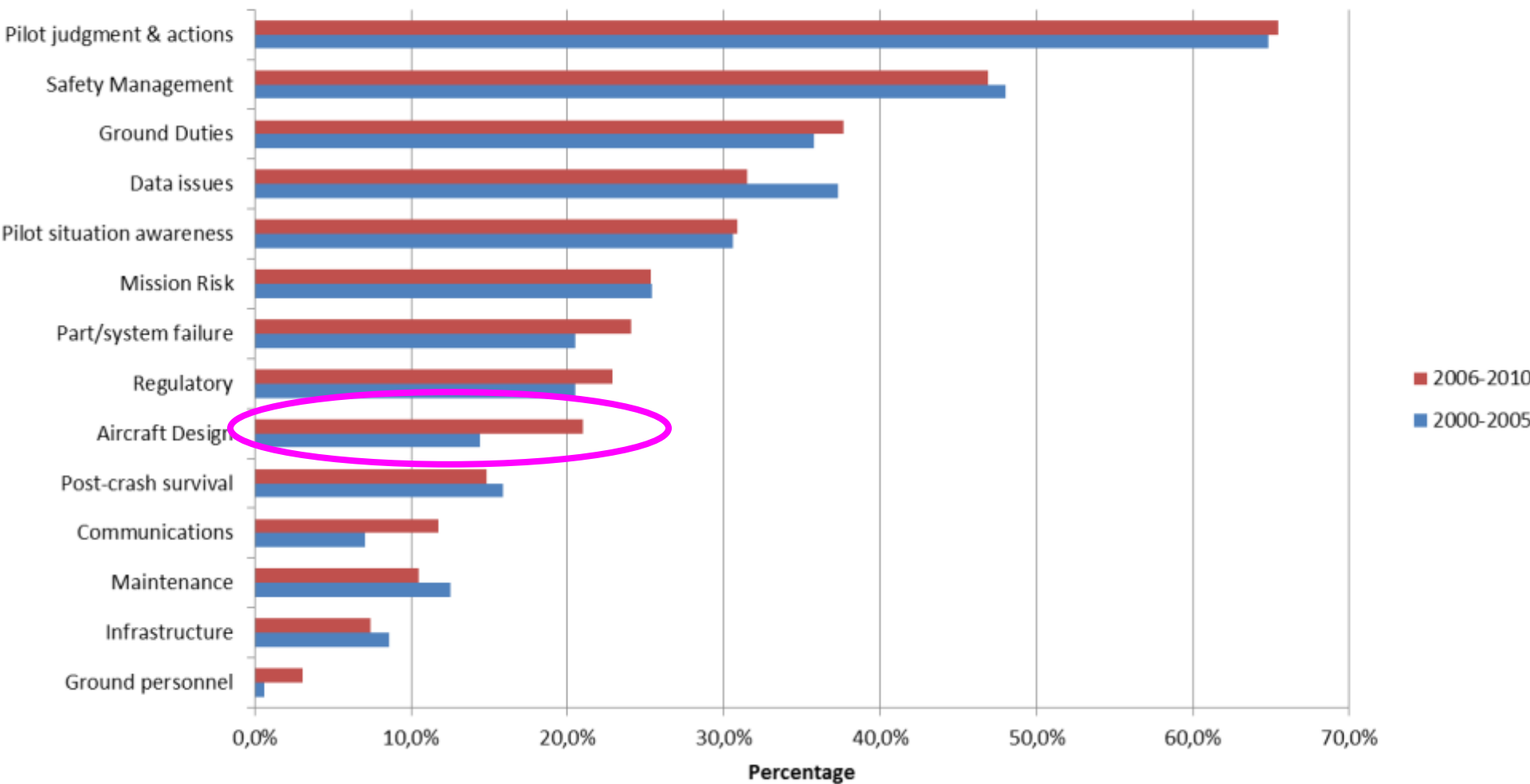


What's new?

EHEST Report 2006-2010

What's new?

Percentage of analysed accidents where SPS Level 1 was assigned at least once



Top identified design-related factors (SPS Level 2)

- **Inadequate or missing procedures**
- **System Safety Assessment**
- **Missing or inadequate performance data**
- **System failure/alert inadequate**
- **Lack of annunciation, caution/warning of critical condition (including low rotor RPM)**
- **Human Machine Interface (HMI)**
- **Design not permitting recovery from flight into Degraded Visual Environment (DVE)**

Preliminary Conclusions

- The analysis of the 2006-2010 accidents is globally consistent with the results from 2000-2005;
- The new data continue supporting the safety actions taken based on the 2000-2005 data.

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From Analysis to Safety Action - Leaflets



HE1 SAFETY CONSIDERATIONS

- Degraded Visual Environment (DVE)
- Vortex Ring State
- Loss of Tail Rotor Effectiveness (LTE)
- Static & Dynamic Rollover
- Pre-flight planning Checklist

German, Italian, Spanish, Chinese,
Portuguese/Brazilian



<http://easa.europa.eu/essi/ehest/category/publication-type/leaflet/page/2/>

HE2 - HELICOPTER AIRMANSHIP

- Comprehensive **knowledge**,
- careful **pre-flight preparations**,
- frequent **flying practice**,
- **avoidance of complacency**

Are the best insurance against becoming an accident statistic.



<http://easa.europa.eu/essi/ehest/2011/12/he2-helicopter-airmanship/>

HE3 - OFF AIRFIELD LANDING SITE OPERATIONS

Contents:

- Planning and Preparation
- Landing Site Identification
- Landing Site Recce
- Types of Approach
- Manoeuvring in the LS
- Departure
- Pilot Errors



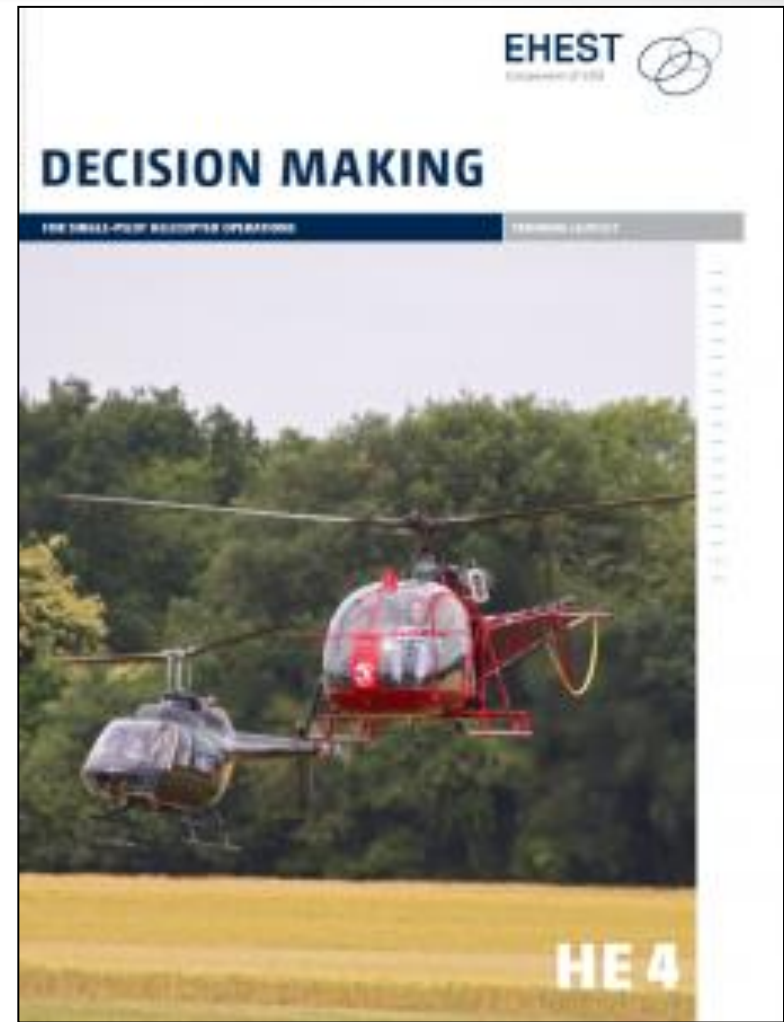
<http://easa.europa.eu/essi/ehest/2012/01/he3/>

HE4 – DECISION MAKING

For Single Pilot Helicopter Operations

Contents:

- Human Factors Affecting Decision Making
- Decision Making
- Decision Error Factors
- Decision Making Models



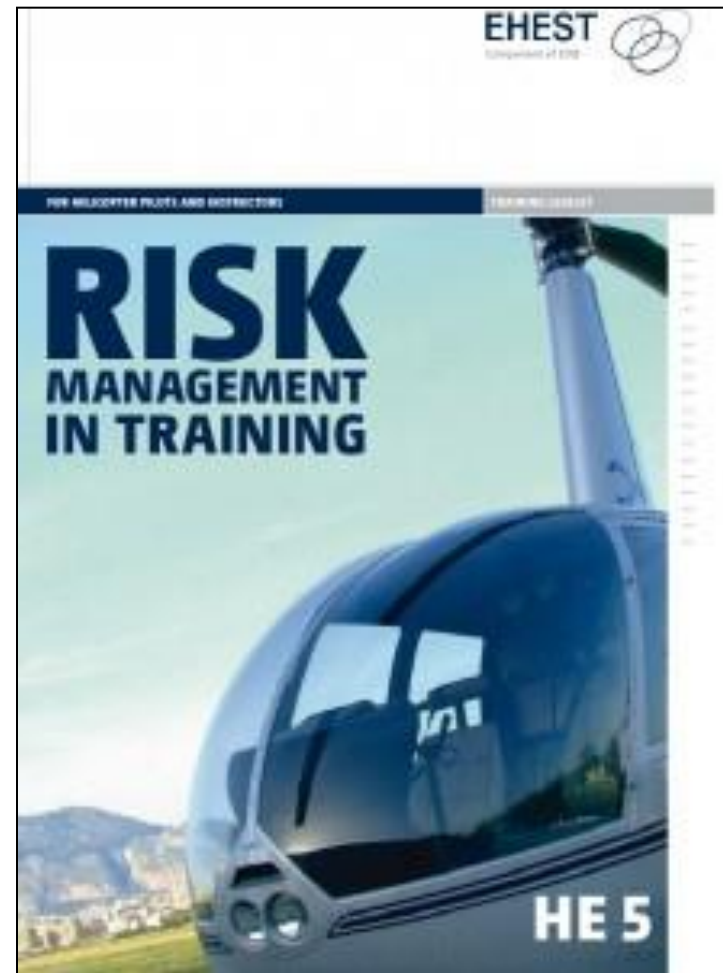
<http://easa.europa.eu/essi/ehest/2012/06/he4/>

HE5 – RISK MANAGEMENT IN TRAINING

For Helicopter Pilots and Instructors:

Improve the safety of helicopter training by:

- Increasing the awareness about accidents, particularly in training
- Explaining risk management concepts in line with the EHEST SMS Toolkit
- Providing tools and methods
- **Providing a practical example of risk assessment in training**
- Assisting the instructors and improving the safety education of trainees in a training context



<http://easa.europa.eu/essi/ehest/2013/03/he5/>

HE6 – ADVANTAGES OF SIMULATORS IN HELICOPTER FLIGHT TRAINING

For Helicopter Pilots and Instructors

Contents:

- Highlight the various helicopter flight simulation training devices available
- Review the additional training and safety benefits related to recent technological and regulatory developments



<http://easa.europa.eu/essi/ehest/2013/07/he-6/>

HE7 – TECHNIQUES FOR HELICOPTER OPERATIONS IN HILLY AND MOUNTAINOUS TERRAIN

For Helicopter Pilots and Instructors

Contents:

- Basic principles
- Threats
- Errors and possible UAS
- Guidance to manage the risks.

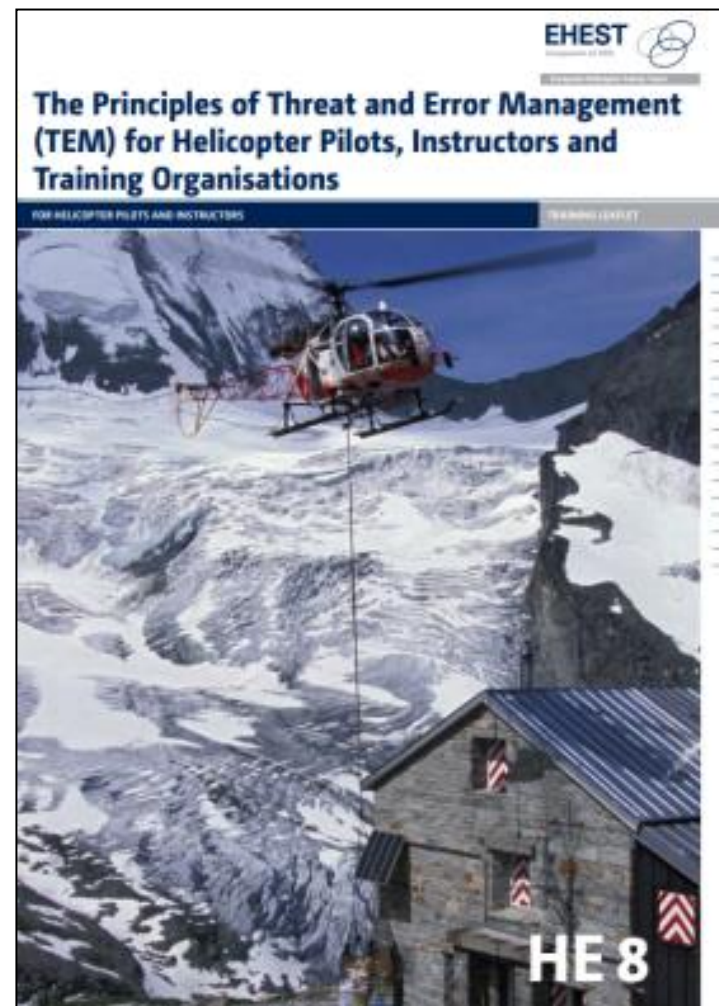
<http://easa.europa.eu/essi/ehest/2014/05/1689/>



HE8 – The Principle of Threat and Error Management (TEM)

TEM proposes that threats, errors and Undesirable Aircraft State (UAS) are everyday events that flight crews must manage to maintain safety.

The aim of this leaflet is to introduce the concept of Threat and Error Management (TEM) to flight crews and training organizations.



<http://essi.easa.europa.eu/ehest/wp-content/uploads/2015/01/HE8.pdf>

HE9 – Automation and Flight Path Management

For Helicopter Pilot and Instructors

- Automation increases the safety?
- Automation reduces the workload?
- Automation reduce errors?
- How manage complex and highly automated helicopters?

Suggestions in how to decrease workload and manage the flight more effectively and safely are made available on this leaflet.



[http://essi.easa.europa.eu/ehest/wp-content/uploads/2015/09/198961_EASA_EHEST_HE9 .pdf](http://essi.easa.europa.eu/ehest/wp-content/uploads/2015/09/198961_EASA_EHEST_HE9.pdf)

HE10 – Teaching and Testing in Flight Simulator Training Devices (FSTD)

For Helicopter Pilots, Instructors and Examiners

Provides:

- Guidance on how to conduct training and testing on FSTD;
- Basic Principle for the best use of FSTD

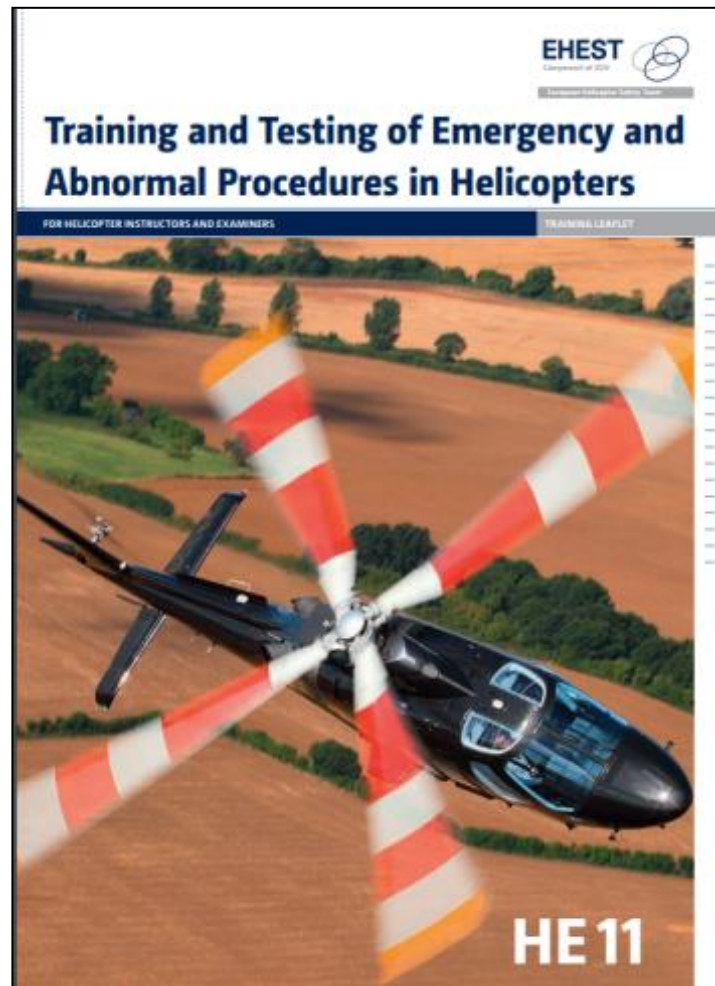


http://essi.easa.europa.eu/ehest/wp-content/uploads/2015/12/206904_EASA_EHEST_HE_10.pdf

HE11 – Training and Testing of Emergency and Abnormal Procedures in Helicopters

For Helicopter Pilots, Instructors and Examiner

Guidance to improve the safety and delivery of instruction and assessment of aircraft EAP in flight.

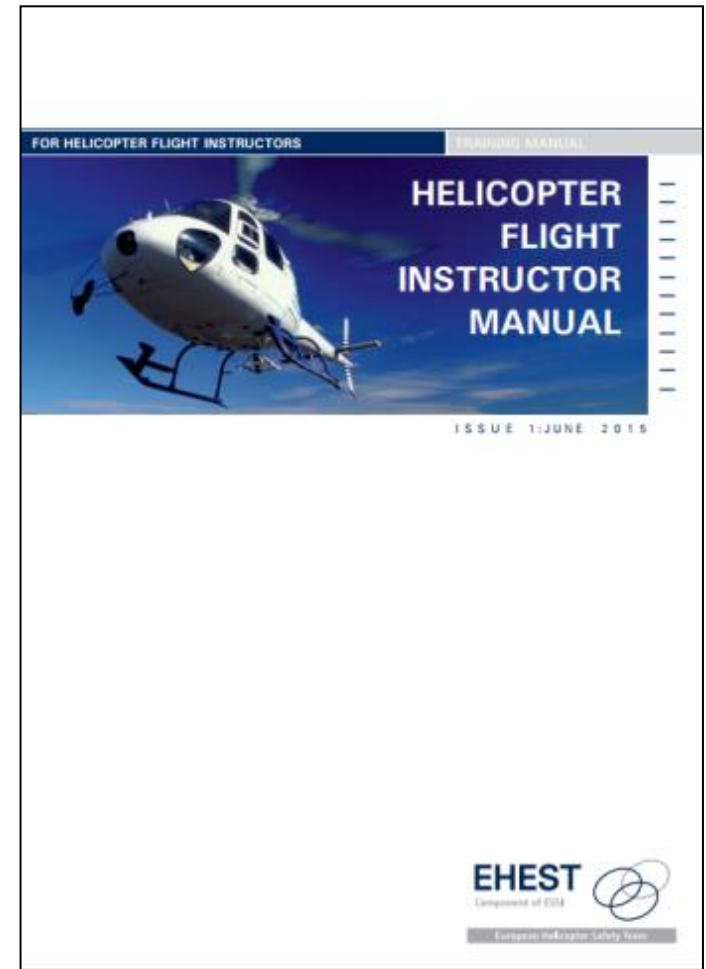


http://essi.easa.europa.eu/ehest/wp-content/uploads/2011/05/EASA_EHEST_HE_11.pdf

Helicopter Flight Instructor Manual

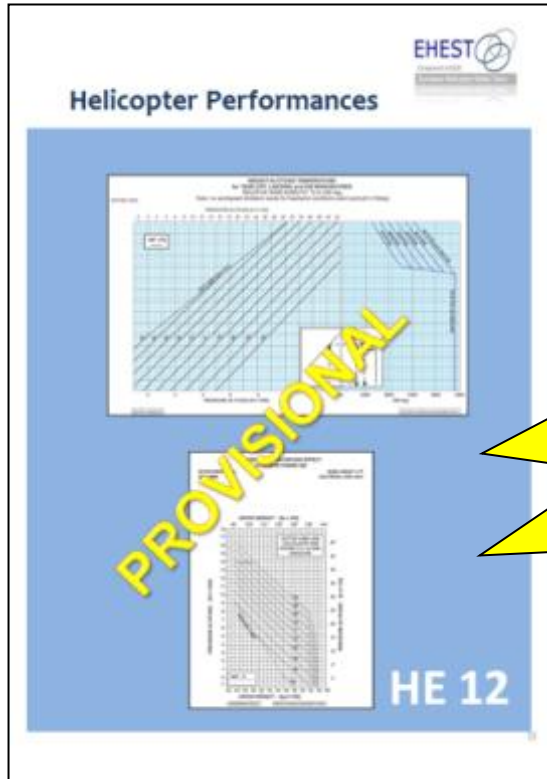
For Helicopter Flight Instructors

- Part 1 addresses Principles and Methods of Instruction;
- Part 2 provides Ground and Air Instruction Exercises.



<http://easa.europa.eu/essi/ehest/2014/05/1689/>

Leaflets – On Going Project



Coming
soon



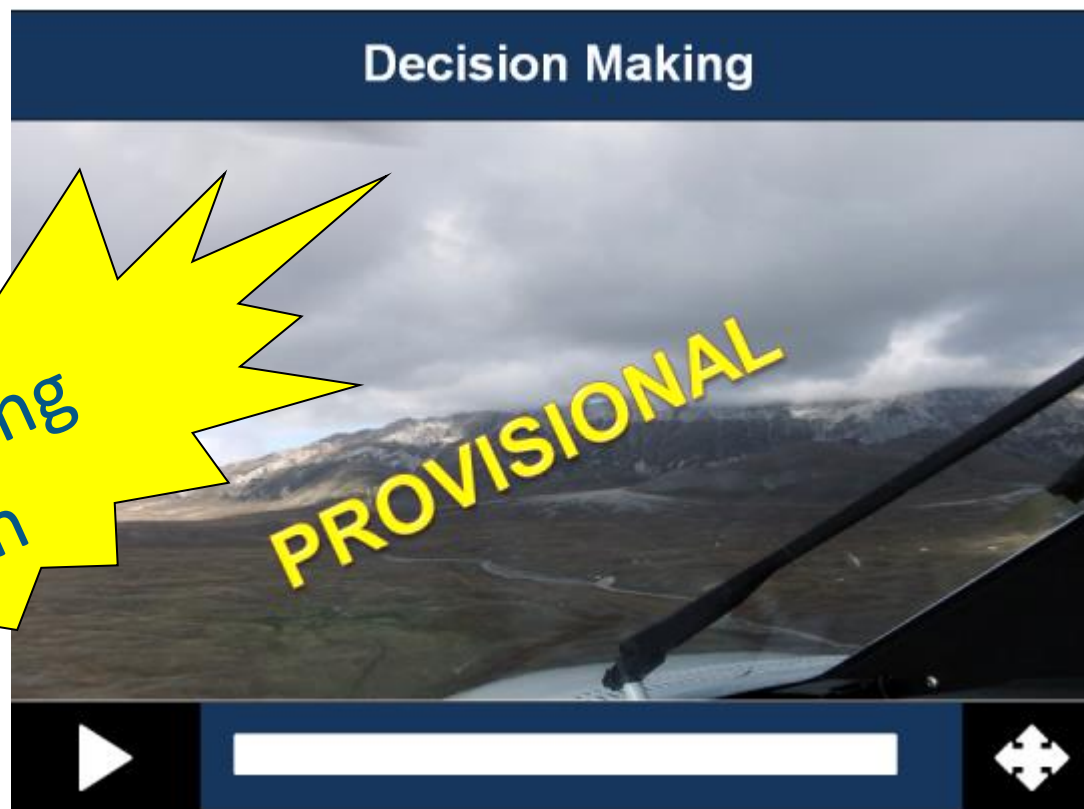
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From Analysis to Action: Videos



VIDEO ON DECISION MAKING

Coming
soon



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Training page on the EHEST website

← → http://easa.europa.eu/essi/ehest/ 🔍 ↻ × EHEST | EHEST ×

EHEST
Component of ESSI

Organisation Publications **Activities** Other Safety teams and links Back to the main page

Training
Analysis
Safety Management
Technology
Communication

Video – Passenger management

...

➤ ESSI

- EHEST <http://www.easa.europa.eu/essi/ehest/>
- ECAST <http://www.easa.europa.eu/essi/ecast/>
- EGAST <http://www.easa.europa.eu/essi/egast/>

➤ EASA

- [Page de Gestion de la Sécurité \(SGS ou SMS\)](#)
- [Revue Annuelle de Sécurité 2011](#)

Thank you!

More information on our website



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Your safety is our mission.