

General presentation Special Condition VTOL

Volker Arnsmeier

eVTOL & New Concepts Section Manager

Your safety is our mission.

Overview

- Applicability of Special Condition (SC) VTOL
- SC VTOL Objectives and setup
- VTOL categories Basic and Enhanced
- Information on novelties covered by SC VTOL
- Information on cooperations, standards and means of compliance

Applicability – SC VTOL

VTOL



rotorcraft



- Likely operational environment



SC VTOL

Objective:

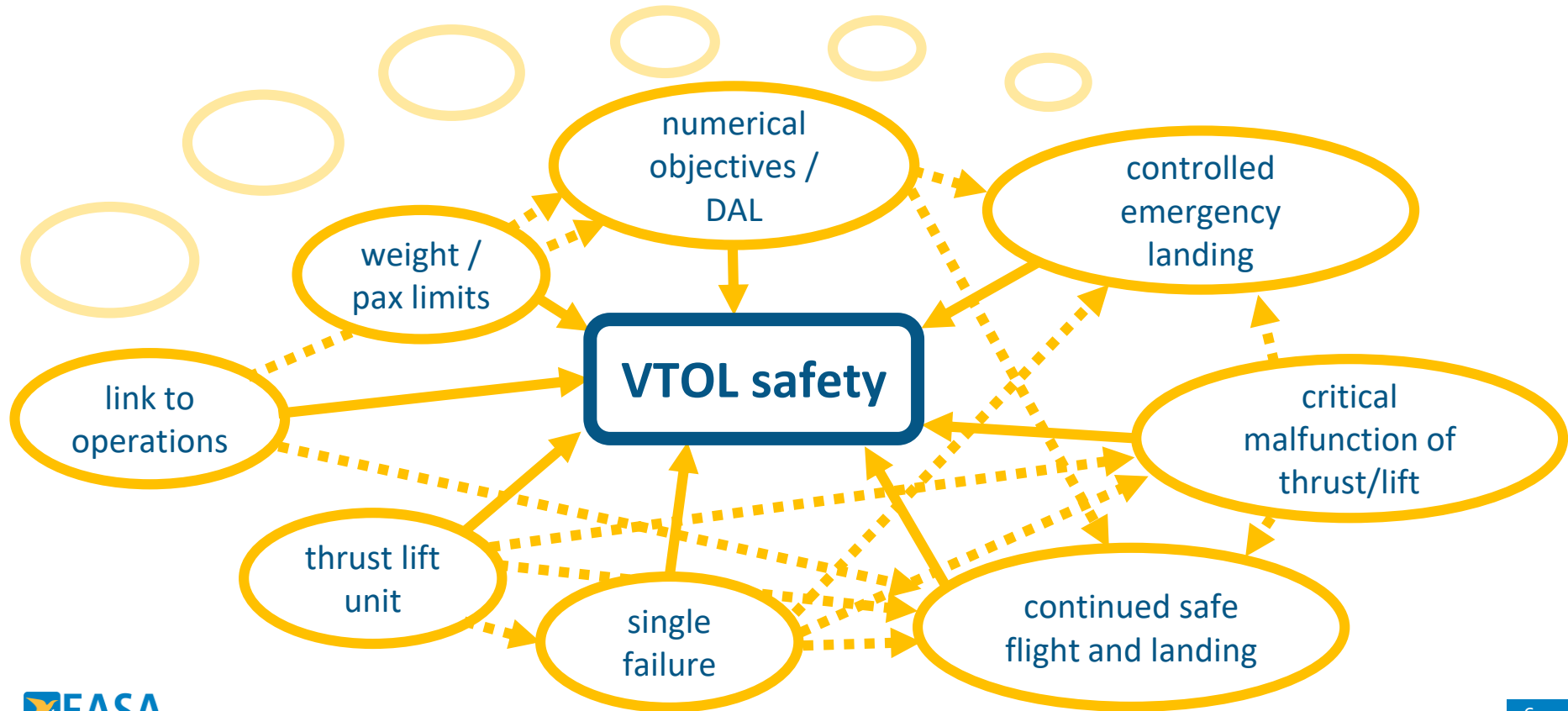
- Level playing field with adequate safety objectives for Pax and 3rd parties
- Using advantage of possible higher redundancy

Decision:

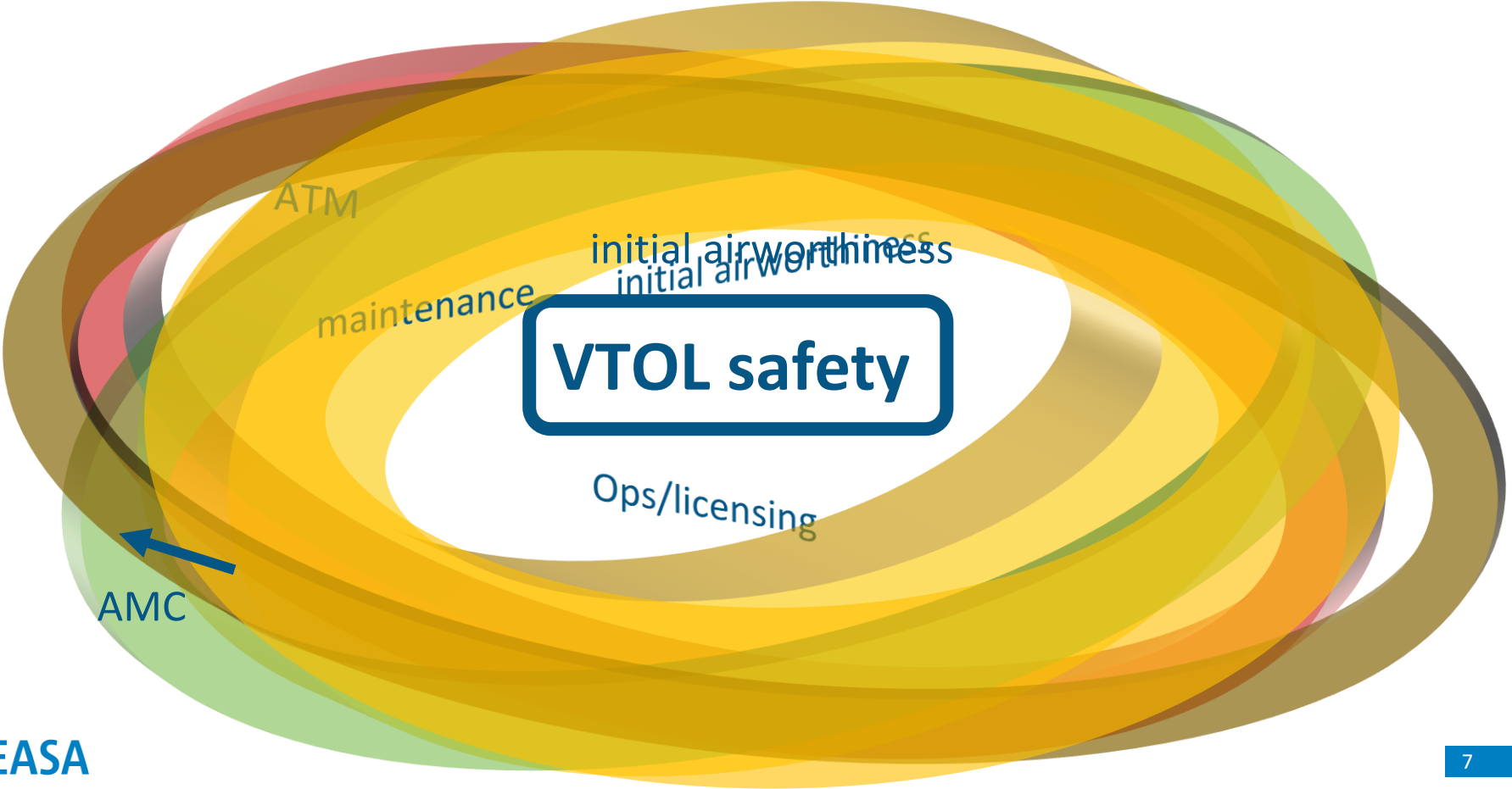
- standalone, incorporating elements of CS-27 and CS-23
- Up to 9 Pax, max. 3175 kg, Special Class Aircraft
- composed of high-level objectives, complemented by Acceptable Means of Compliance (AMC), similar to CS-23 Amdt 5
- will be supplemented in future to address aspects such as remote piloting or autonomy

15 Months

SC VTOL construction

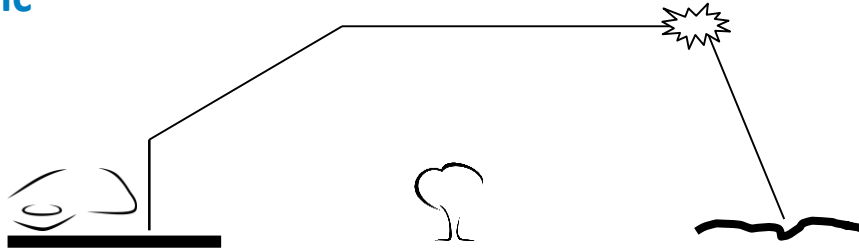


SC VTOL construction

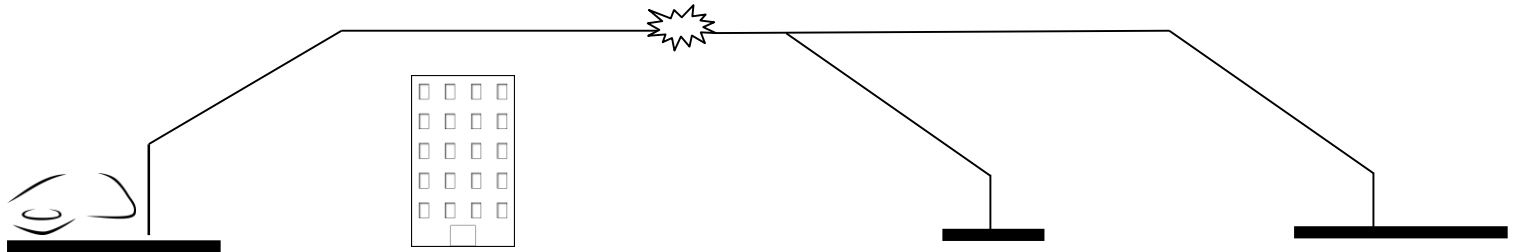


Categories

category Basic



category Enhanced



Safety Levels

→ Category Basic

- **Analogy to CS-23, but slightly higher due to Fly by Wire technology**
- **Controlled Emergency Landing**

→ Category Enhanced

- **Analogy to CS-27 Category A helicopters and CS23 Level 4 aircraft**
- **Continued safe flight and landing**

Continued safe flight and landing



For information on novelties

- Flight recorder, Top 10 of NTSB recommendations + aircraft with new technology
- Bird strike; ARAC working group results available
- No-Single-Failure criteria implemented; address recurrent issues on rotorcraft with the new technology
- New crashworthiness concept developed; allow limited damage to the a/c

For information

- Contact with various authorities on details of SC VTOL concept;
- RMT.0230 related to OPS, FCL, ATM (for UAS) embraces VTOL and UAM aspects;
- EASA participation in EUROCAE WG-112 established;
 - 5 Subgroups (more details in separate presentation)
- Acceptedu Means of Compliance developed stepwise
 - Presentation of details during this Symposium
- <https://www.easa.europa.eu/document-library/product-certification-consultations/special-condition-vtol>



Thank you
Any further question?