

#### LUFTFAHRTAGENTUR

# EASA Skydiving Workshop

Technical flight safety aspects other than Operation / Human Factors

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# **Certification** aspects

- EASA SIB 2018-18 R1 for restraint systems
- SIB known in the community ?
- All aircraft modifications and STCs approved ?
- Special Condition SC-O23-div-01 'Use of aeroplanes for parachuting activities' applied?
- Specific Operation envelope adressed in service life / maintenance instructions (e.g. fatigue analysis)
- Certification for use in parachute operations is depending on the operational envelope



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### Certification does only allow to operate within the given limits!

# **Aircraft Suitability – Safety Margins**

- **Structural strength** of your aircraft adequate?
- CG Range large enough?
- Category N-Normal (3,8g) versus U-Utility (4,4g) adequate ?
- Is your aircraft operation in accordance with AFM Limits (e.g. your risks addressed with SIB 2018-18, STC Supplements included)?
- 'Common Cause' failures adressed in your assessment (e.g. jumper move)? If if can happen – it will happen – it is just a matter of time!
- **Restraint** systems for parachutists suitable enough?
- Stability and Control addressed?

Is the aircraft suitable for safe parachute dropping? Are the Safety Margins appropriate?





# **Continuing Airworthiness**

- **Specific operation** up and down engine shock cooling
- High speed decent
- Higher engine wear to be expected
- High Rate of engine failures, loss of power more likely !
- Modifications addressed (e.g. STC) ?
- Part M/ML Maintenance Programme adapted?
- Who checks that scheduled maintenance items are adhered to during high season?





#### Has the maintenance programme been adequately modified for para ops?



# **TCO (third country registration) aircraft**

- Higher number of TC registred skydiving ۲ aircraft (N-Reg) within the EU
- EU **Regulations** do not fully address these ۲ aircraft (Parts SPO, NCO apply – Parts 21, M/ML do not apply)
- Who is the actual operator / who is responsible for what?
- It is possible to change to a European register -> one legal system for better operational/airworthiness control!



## Accident causal and contributing factors do not depend on Registration!

# Solutions ? Risks properly adressed ?



- Select the most **"suitable and safe**" aircraft for your operation
- Modify your aircraft 4safety
- Implement EASA SIB 2018-18 R1
- Develop and implement the AMP aircraft maintenance programme suitable for your operation and maintaining your assett
- Coordinate with your competent authority regarding the **proper regulations for your a/c registration**

Close the holes in the cheese! Actively work together4Safety !







# Chat is open for discussion and proposals