



EASA
European Aviation Safety Agency



BIS Parachute Operations

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Your safety is our mission.

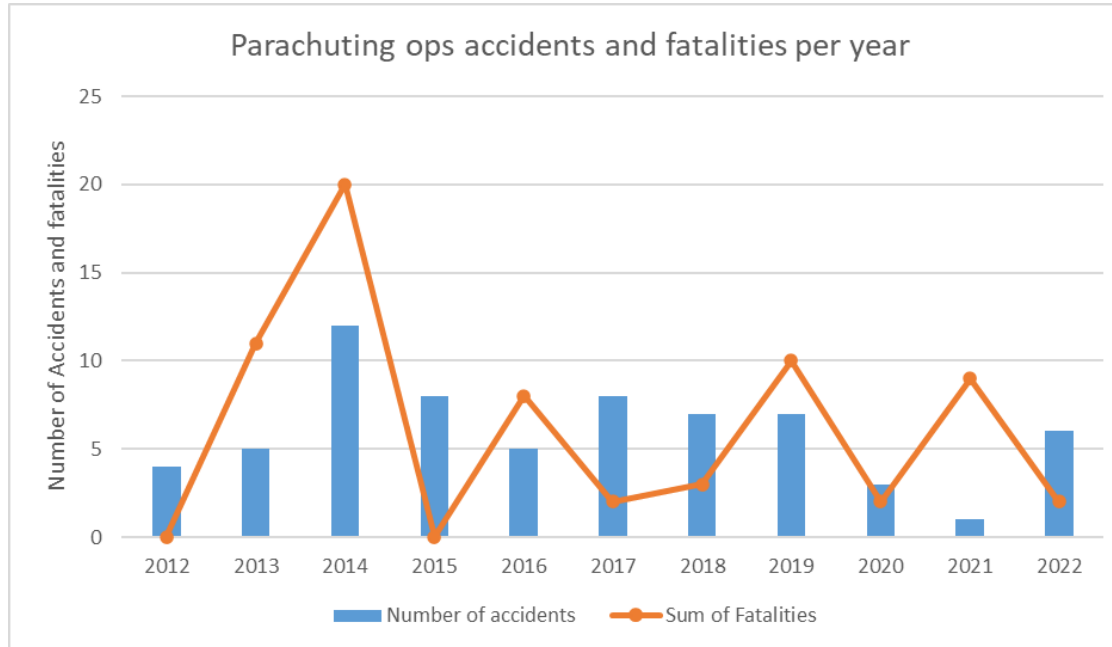
An agency of the European Union 

TE.GEN.00409-001



Parachuting OPS accidents → SIA

➤ A lot of accidents and serious incidents



•66 accidents

•67 Fatalities

There is a common European concern for the safety of parachuting flight operations activities.



Safety Impact Assessment (SIA)

- Something needs to be done → SIA initiated

the overall objective of the SIA is to provide an accurate and facts-based assessment of the safety issue and propose actionable mitigating actions

- that would lead to BIS and EPAS implementation to control this Safety Issue and prevent accidents from occurring

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- Rulemaking Task (RMT)
- Safety Promotion Task (SPT)



From SIA to BIS review tasks

- *Action #1 Pre-flight planning and preparation*
- *Action #2 Dedicated training/ qualification of parachuting pilots*
- *Action #3 Pilot and Jump master team training*
- *Action #4 Jump master and individual skydiver training on basic aerodynamics*





ACTION 1 – OPS CONTROL

Action number	Action title	Issue	Objective	Type of action (RMT, SPT, RES, MST)
1	Pre-flight planning and preparation	Organisation and planning of parachuting flights is without operational control (e.g., absence of an organisation accountable for a safe operation or unclear allocation of responsibilities.	Train through safety promotion the ideal preparation for parachuting flights. Revise and change, if necessary, the current rules to reflect on both NCO and SPO operations to ensure safety.	SPT, RMT

→ Action 1 - Operational control, including pre-flight planning and preparation



ACTION 1 – OPS CONTROL

- Part-SPO is pretty good due to Part-ORO requirements, however,
- Part-NCO rules put too much emphasis on the PIC

Should the declaration process be proportionally implemented for private parachuting flight operations?

Benchmark of SPO, DTO, Balloons, Sailplanes declaration



ACTION 1 – OPS CONTROL

→ “light” declaration requirements for NCO parachute flight operations

Why? What should be in?

- Organisational aspect
- Risk Assessment
- Standard Operating Procedures
- Training of the crew (pilot & task specialist)



ACTION 1 – EXAMPLES

SAO.DEC.100 Declaration

Regulation (EU) 2018/1976

- (a) In the declaration referred to in Article 3(2), the operator shall confirm that it complies and will continue to comply with the essential requirements set out in Annex V to Regulation (EU) 2018/1139 and with the requirements of this Regulation.
- (b) The operator shall include in the declaration all of the following information:
 - (1) the name of the operator;
 - (2) the place where the operator has its principal place of business;
 - (3) the contact details of the operator;

DTO.GEN.115 Declaration

Regulation (EU) 2020/359

- (a) Prior to providing any of the training specified in point [DTO.GEN.110](#), an organisation intending to provide such training shall submit a declaration to the competent authority. The declaration shall contain at least the following information:
 - (1) the name of the DTO;
 - (2) contact details of the DTO's principal place of business and, where applicable, the contact details of the aerodromes and the operating sites of the DTO;
 - (3) names and contact details of the following persons:
 - (i) the representative of the DTO;
 - (ii) the head of training of the DTO; and
 - (iii) all deputy heads of training, if required by point [DTO.GEN.250\(b\)\(1\)](#);



ACTION 1 – OVERSIGHT

Authority oversight could be performed according to AMC1 ARO.GEN.305(d) "oversight declared organisations":

- inclusion in the programme 12 months.
- one inspection within each 48-month or more based on RBO
- Cost-effective risk-based oversight:
 - ACAM
 - Desktop review of SOPs, RAs
 - Onsite when needed
- Can we consider, e.g. DTO "Annual internal review" approach



ACTION 2 – PILOT TRAINING

Action number	Action title	Issue	Objective	Type of action (RMT, SPT, RES, MST)
2	<i>Dedicated training/qualification of parachuting pilots</i>	<i>Data shows that pilots flying aircraft in parachute operations need a better training to be aware of all the risks involved. Dedicated training and qualification of parachuting pilots would ensure sufficient experience.</i>	<i>Ensure proper training of pilots by experienced instructors holding proper ratings, addressing all the major risks involved.</i>	RMT/AMC

To be merged with action 1

Action 2 Dedicated training/qualification of parachuting pilots (RMT only)



ACTION 3 – PILOTS & SKYDIVERS

Action number	Action title	Issue	Objective	Type of action (RMT, SPT, RES, MST)
3	<i>Pilot and Jump master team <u>communication & coordination</u> training</i>	<i>The coordination between jump master and pilot ensures correctly executed flight and exit of the skydivers to minimise the risk of loss of control during the flight.</i>	<i>Ensure proper teamwork between pilot and jump master to ensure correct execution of the jump and to keep the aircraft within its envelope.</i>	<i>SPT, RMT</i>

Action 3 – Pilot and Jump master communication and coordination (SPT only)



ACTION 4 – SKYDIVERS TRAINING

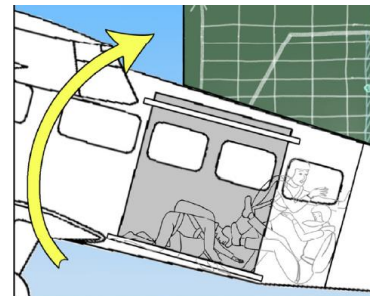
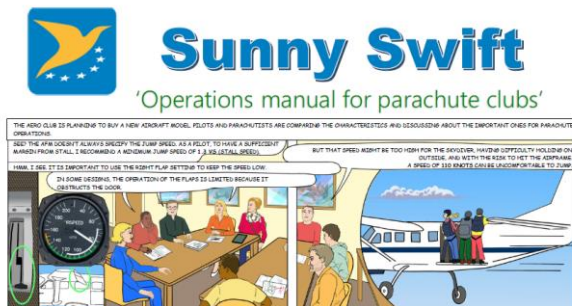
Action number	Action title	Issue	Objective	Type of action (RMT, SPT, RES, MST)
4	<i>Jump master and individual skydiver training on basic aerodynamics</i>	<i>Information on the aircraft's aerodynamics and limitations is necessary to ensure adherence to procedures.</i>	<i>Training about aeroplane aerodynamics and how parachute operations affect the aircraft's envelope.</i>	<i>SPT</i>

Action 4 – Jump master and individual skydiver training on basic aerodynamics (SPT only)



SAFETY PROMOTION 2023 - UFN

- Social Media → leaflets/ videos/articles etc.
- Operations manual for parachute clubs
- Workshop for the skydiving community
- Learn from Parachute operation accidents





ACTION 5 – TECHNICAL FAILURES ADDED

➤ Action #5 Technical failures & engines & Maintenance programmes

→ Experts reviewed technical failures.



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Thank you!

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