

<i>SUBJECT:</i>	Technical and Safety Committee Annual Report & Open Meeting Agenda	<i>AGENDA #</i>	20
<i>AUTHOR:</i>	dr. István SIPOS, Chair, ISC Technical and Safety Committee		
<i>DATE:</i>	15 November 2023	<i>PAGES:</i>	10

**TECHNICAL & SAFETY COMMITTEE
INTERNATIONAL SKYDIVING
COMMISSION**

ANNUAL REPORT FOR 2023

1. The 2022 Safety Report was compiled. The report is being distributed at the Plenary Meeting, and the report will be e-mailed to all countries on the T & S e-mail lists.
2. The ISC T&S material being distributed at the Plenary meeting is:
 - *Safety Report for 2022 and Power Point Presentation of same.*
 - *The 2023 Safety Survey Form and related notes*
 - *Parachuting Aircraft Incidents 2023 Report*
3. No Information Notices were issued in 2023.
4. Parachuting aircraft incidents, in some cases with much loss of life, have been a matter of concern. EASA has interested itself in this matter and there may be a document from EASA in the near future.
5. Digital Certificate of Proficiency – See **Annex 5** to this report
Gustavo Eduardo Reyes and Alberto Martín Paracuellos progressed this matter during the year.
6. Indoor skydiving safety - See **Annex 6** to this report.
Mauri Vaistö carried out the research on this matter.
7. Restraints on skydiving aircrafts in FAI/ISC Competitions
The recommendations of T&S are attached as **Annex 7** to this report.
Ralph Schusser carried out the work on this issue.
8. Medical fitness at competitions
The T&S Committee has worked on this project. Thanks to Dr Stephan Kramer, a member of the T&S Committee, who took the lead on this matter. Stephen participated in the CISM meeting some months ago and he is now an Alternate Delegate from USA to CISM.
The documents attached to this report, as **Annex 8** to this report are the T&S recommendations to the Plenary.
T&S feels it is essential to have a protocol for the protection of ISC athletes. This protocol has been approved by CIMP of FAI.

On behalf of the Technical & Safety Committee I acknowledge the deep commitment and the long-lasting help and support offered by Tony Butler (UK) in all matters pertaining to safety and technical issues in skydiving, over four decades. In all those years Tony was a most valued colleague and was always prepared to help and advise. We wish you every happiness and success in your retirement.

I thank the T & S Committee Members, and those nations which responded to the T&S survey. Their important input makes it possible for the T&S Committee to produce valuable safety material.

Blue skies

dr. István Sipos

T & S Committee Chair

15 November 2023

Items 5, 6, 7 and 8 annexed to this report

Annex 5 – T&S Committee Report to 2024 ISC Plenary Meeting

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Digital Certificate of Proficiency status update

Summary and Recommendation

Summary

During the ISC 2023 meeting in Malmö the T& S Committee presented a proposal to implement a Digital version of the Certificate of Proficiency and we are now ready to request Plenary approval and initiate its implementation.

Recommendation

To initiate the implementation of the dCoP using the platform MERIT.

The T&S Committee will contact ISC Delegates who shall nominate a member of the National Parachuting Association to be the Point of Contact from that country to manage the dCoP.

The T&S Committee will grant administrator status to the appointed person in the Merit platform and will monitor and assist in the initial implementation phase.

There is no need to make any modifications to SC5 since 2.3.1 (4) already covers the use of a Digital CoP.

The Digital CoP should be acknowledged by all as a valid CoP, approved and recognised by the ISC.

Annex 6 – T&S Committee Report to 2024 ISC Plenary Meeting

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INDOOR SKYDIVING ACCIDENTS REPORT

Background

Indoor skydiving as a sport and as an attraction for 1st time flyers has grown a lot in recent years. The amount of tunnels have multiplied in the last 10 years. In 2014 there were 55 tunnels and at the end of 2022 there were 217 wind tunnels around the world. Accidents occur, but there is no international database about accidents. Many wind tunnels are privately owned or under one big manufacturer company and they don't have interests to share accident reports.

This survey

Meaning of this survey is to find out if there are possibilities to get enough data from wind tunnel accidents to make reasonable statistics from the industry / sport.

Data from wind tunnels

Many wind tunnels are privately owned or under big manufacturer. Wind tunnels are not very willing to give accident reports to outsiders because they are afraid of getting negative publicity or possibly accusations from it. Also, lack of recourses from tunnels affect to availability of reports. For this survey we used personal connections so we could explain why survey is done and that it's 100% anonymous.

Data from wind tunnels is very different and it's hard to combine as simple report. Total amount of flyers or flight times are not available from many tunnels. Also what is considered an accident is very different in different tunnels. Only reasonable statistics for this survey is based on amounts of accidents per month / year and separated to sports flyers / 1st timers.

29 wind tunnels were contacted for this survey. 12 wind tunnels did give information about accidents. 3 of 12 tunnels who answered didn't collect data or it was based on memories and could not be added to statistics. 5 tunnels also did promised to give reports but didn't ever give it.

Based on useful reports from wind tunnels:

1st timers: One accident in every two months.

Sport flyer: One accident in every 6 weeks.

Fatalities have happened in wind tunnels. 2023 fatal accident happened in Australia. This was in the news. Other fatalities have happened in last years, but we haven't found any fact from those.

Annex 7– T&S Committee Report to 2024 ISC Plenary Meeting

Page 1 of 1

Statement on restraint systems in aircraft used in FAI/ISC Competitions

Summary and Recommendation

Summary

Numerous past accidents show that weight und balance is a significant cause of accidents. The use of Restraint Systems contributes to an increase in dynamic flight safety and is supported by the T&S Committee.

Recommendation:

The use of Restraint Systems is recommended to Organizers, recognizing that they are free to decide whether to do so or not, unless the operator's risk management show serious opposing arguments and unless restraints are required by law in the jurisdiction.

The use / non-use of Restraint Systems is provided as information to the Plenary and in the Bulletin to inform competitors of the position.

T&S Committee asks Plenary to task the FAI-Controller with confirming the presence of Restraint Systems in the competition aircraft. The Organizer is to provide the FAI Controller with the legal requirements and/or Risk management on request.

Rules and Regulation is requested to prepare a suitable update to the FAI Controller Handbook. Plenary is asked to agree to this update.

Proposal:

3.2 On Arrival at the event

12. if applicable must ensure that all aircrafts are equipped with restraint systems as specified in the OA and the Bid Document

3.2 At the start of the event

3. If relevant, the FAI-Controller must advise the compulsory use of the Restraint Systems. Not using the Restraint-Systems can be penalized by the Safety Panel as a safety violation in accordance with SC 5 4.8.

R&R is asked to update the FAI-Controller Checklist as appropriate.

Annex 8 – T&S Committee Report to 2024 ISC Plenary Meeting

**ISC MEDICAL EVALUATION FORM
for
Competitor Due to Concussion/Injury**

To: Licensed Medical Doctor

Date: _____

Time: _____

Competitor Name: _____

Competitor Date of Birth: _____

Medical Clearance ID Number: _____

ISC Official Initiating this Evaluation: _____

The above-named competitor/athlete was identified as having a possible concussion or other injury including head injury. Your medical evaluation is critical for this athlete to safely continue in a skydiving competition.

INSTRUCTIONS: Please complete this form and return a copy to the competitor or any competition official. If a head injury is suspected, you may refer to the attached "Returning After a Head Injury During a Sporting Event" pages if in your judgement, it is appropriate to do so.

The minimum criteria for an athlete to safely continue in a skydiving competition is as follows:

1. The competitor must have clear mental faculties and situational awareness to make rapid decisions and initiate normal and emergency procedures if necessary.
2. There must be no physical or mental limitation that would preclude a skydive operation which includes preparing equipment; climbing to, exiting, and descending from an aircraft altitude up to 14,000 feet (4267 meters) above ground; deploying and steering a parachute; and completing a safe landing. Some competitors may instead operate inside of a circular enclosed glass wind tunnel that simulates continuous freefall.
3. The competitor must not be prescribed or under the influence of any drug that could alter perception or mental faculties including narcotics, tramadol, or other sedating substances. Consult WADA Drug List for more information.

The competitor and skydiving competition officials are relying on your experience and expertise to perform this assessment. The safety of all concerned is the primary objective.

Please indicate the results of your medical assessment by completing the attached section on Page 2.

To: ISC/FAI Competition Officials

Date: _____

Time: _____

Competitor/Athlete: _____

I have examined the above-named competitor and have determined (select only 1 result):

_____ NO, this competitor may not resume skydiving competition at this time.

_____ YES, this competitor may resume skydiving competition with no limitations.

_____ YES, this competitor may resume skydiving competition ONLY after the limitations and/or requirements described are met:

Licensed Doctor Name: _____

Contact information: _____

Date: _____

Time: _____

.....

Received by ISC/FAI Official: _____

Date: _____

Time: _____

Meet Director and Chief Judge Notified: _____

HoD/Team Manager Notified: _____

Returning After a Head Injury During an ISC Sporting Event

Anyone who has a head injury during a sporting event needs to immediately stop all activity and not return to sporting activity that day. Being active again before the brain returns to normal functioning increases the person's risk of having a more serious brain injury.

Every person involved in a sporting event needs to know the importance of getting medical help when a competitor has a head injury.

The decision about when a competitor can safely return to competition must be made by a doctor. The doctor decides on a case-by-case basis. Things that help the doctor decide when a competitor may resume competition include:

1. The competitor's symptoms
2. The competitor's medical history
3. The competitor's concussion history
4. The competitor's medication and alcohol use
5. The competitor's ability to stand and balance on one foot with eyes closed
6. How quickly the competitor can solve simple math problems
7. The competitor's ability to pay attention and answer questions to test learning and memory.

Doctors and other concussion specialists agree that competitors must not return to competition until symptoms are completely gone, both at rest and during exercise or exertion. Using medicine to improve concussion symptoms is not the same as being symptom-free. Young adults have longer recovery times, so they may need to wait longer before returning to competition.

In most places, a doctor must give written permission for children, young adults, and adult athletes to return to competition sporting activity.

The first treatment for a concussion is 1 to 2 days of rest, both physical and mental. A doctor must specify a follow up activity program based on the competitor's injury and symptoms. After resting, the competitor can gradually increase activity PROVIDED IT DOES NOT CAUSE NEW SYMPTOMS OR WORSEN EXISTING SYMPTOMS. The competitor must be symptom-free for 24 hours at the maximum level of activity authorized by the doctor, and then rechecked by the doctor.

A doctor must always make the decision if the competitor may resume sporting competition activity.

The above rules apply for competition after a first concussion. After more than one concussion, the competitor will most likely need a longer recovery time. Because the risk for a second concussion is greatest within the first 10 days of the first concussion, it's extremely critical to make certain the competitor is completely recovered before they return to competition. A second injury, even if not a head injury, can cause permanent brain dam

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TECHNICAL & SAFETY COMMITTEE

INTERNATIONAL SKYDIVING

COMMISSION

OPEN TECHNICAL & SAFETY MEETING, ORLANDO (FL) USA **31 JANUARY 2024**

TECHNICAL & SAFETY COMMITTEE 2023

Chair	dr. István Sipos, Hungary
Deputy Chair	Liam McNulty, Ireland
Members	Alberto Martin Paracuellos, Spain Chang Il Choi, Korea Gustavo Eduardo Reyes, Argentina Ralph Schusser, Germany Stephen Kramer, USA Marc Belligan, South Africa Mauri Vaistö, Finland

AGENDA

- 1. Review of T & S work in 2023**
- 2. Safety Survey and Report for 2022**
- 3. Updates on:**
 - Digital certificate of proficiency**
 - Restrains in skydiving aircrafts**
 - Indoor skydiving safety**
 - Medical fitness at competitions**
- 4. Suggestions for future work of T & S Committee**
- 5. Any other item raised by attendees**