

International Aerobatics Competition Rules for PG

Version 4 (08/05/03)

Registration and Responsibility:

The entry fee and the number of selection and competition days will be announced in the Local Rules of the event.

Each competitor must hold an FAI sporting licence issued by the NAC he represents.

Drugs are prohibited: Refer to FAI GS Rules.

Each competitor in the competition participates under his own responsibility. By signing the **liability waiver** (national law permitting), the pilot assumes the responsibility for any damage caused during the competition, the flights or transportation, to the pilot himself and to third parties.

Each competitor must hold a valid **air third party insurance**. Personal medical insurance is highly recommended.

Each competitor is responsible for his manoeuvres and should only perform manoeuvres that he has practised and that he controls.

Equipment:

Each competitor must show a recent (less than 1 month) authorisation from the manufacturer to fly his glider.

A dry reserve parachute is compulsory, and should be in good condition and recently folded. After a water landing a new reserve has to be used if the reserve is wet.

A helmet is compulsory. The local rules will specify the type of helmet allowed.

Use of ballast is forbidden.

Dorsal protections such as an airbag or air foam are strongly discouraged.

Safety

The aerobatics manoeuvres are only allowed above the water and in a designated area called "**flight box**" (pilots should take in account the drift caused by wind).

It is strictly forbidden to fly over the public (direct elimination from the competition).

The judges may issue a warning to any pilot who is considered to be performing uncontrolled manoeuvres. In case of recurrence or in case of unsafe comportment, the pilot can be disqualified from the competition.

The pilot must prioritise safety during his routine: if the pilot no longer has sufficient height, he must abort his program.

Emergency stop signal:

In case of emergency, the flight box can be closed.

A sound signal and/or a visual signal (cross) over the raft announce that all aerobatics manoeuvres and all water landing must immediately stop.

General Behaviour:

Competitors must respect the decisions of the judges.
Competitors must respect the schedule of briefings and shuttles.

Pilots representation:

During the registration 2 pilots must be elected to represent the pilots when ever needed.

Protest:

All routines are recorded on video and will be referred to in case of a protest. To dispute a decision, the pilot must present his protest in writing with the protest fee provided for in the local rules to the meet Director who will pass it on to the judges. This fee will be returned if the protest is upheld. The pilot may personally defend his protest in front of the judges.

In case of a protest against the Judges a special Jury must be formed. It is composed of the Senior Judge and 2 elected pilots non involved in the case and especially elected for that case.

Validation of Run :

In case of difficulties (meteorological conditions, organisations, ...), the pilots' representatives and the jury meet to decide to validate or cancel the run.

A Run will be considered valid if 67% of the pilots complete their routine.

If four or more runs are completed, each pilots lowest score will be tossed out only when a pilot or pilots do not have the opportunity to fly and the 67% rule comes into effect.

Failure to fly in launchable conditions will not invoke the validity rules and will not cause a run to be thrown after 4 are flown.

Validation of the competition:

A minimum of three runs are required to validate the competition.

Prize money:

There should be prize money and the local regulation will announce the amount and the rule for allocating the prize money.

Competition Format:

The Calendar must indicate if the competition is open to teams, individuals or both. Each competition may include qualifying rounds and a final on the last day, this must be specified in the Local Rules.

The Local rules must specify which format are going to be run among the following list:

The organiser must announce before the start of the competition the number of manoeuvres per flight allowing all the competitors to get time enough to perform the flight. **This number of manoeuvres is called X.**

Competitions for Individuals:

Solo Compulsory Program

Each pilot must execute a required routine as imposed by the jury
The routine consists of a series of X manoeuvres

Solo Announced Program

Each pilot must submit his routine prior to his run. The pilot may choose his routine from the list of manoeuvres by filling in the "Announced Program" table in annex. The number of manoeuvres is compulsory: and announced before the competition. Each manoeuvre may only be performed once within the routine (unless performed in the opposite direction i.e. left/right).

Solo Expression session

The pilot is totally free to perform manoeuvres without announcing a routine. The quantity of manoeuvres is unlimited but only the X best manoeuvres performed once in one direction will be taken into account for the technical note.

Competitions for teams:

Synchro Compulsory Program

All teams must execute a required routine as imposed by the jury.
The routine consists of a series of X manoeuvres (see computing table in annex).

Synchro Announced Program

Each team must submit his routine prior to his run. The team may choose his routine from the list of manoeuvres by filling in the "Synchro Announced Program" table in appendix. The number of manoeuvres is compulsory: and announced before the competition. Each manoeuvre may only be performed once within the routine (unless performed in the opposite direction i.e. left/right).

Synchro Expression Session:

The team is totally free to perform manoeuvres without announcing a routine. The quantity of manoeuvres is unlimited but only the X best manoeuvres performed once in one direction will be taken into account for the technical note.

Selection rounds:

Before the competition start selection rounds will be mandatory for all the pilots to participate in the event. However for well known pilots the Judges are entitled not to require these pilots to participate to the selection. The dates of the selection rounds will be indicated in the Local Rules

Each team and/or individual pilot must show their ability by performing official manoeuvres to the satisfaction of the Judges.

The aim is to demonstrate the pilot's ability to fly the competition.

Official manoeuvres to be performed during the selection rounds:

- Fast exit (less than one turn) from a deep spiral with pitch movement controlled and same manoeuvre without pitch movement.
- Full stall
- Wing over
- Asymmetric spiral
- SAT manoeuvre

Other points for Judges appreciation:

- management of the descent (position, drift...)
- flow, rhythm, connexion
- safety

Elimination if:

- The pilots' skills are insufficient to perform the minimum required manoeuvres for the competition
- The manoeuvres are performed unsafely.
- No respect of the flight box (including the drift).
- Others safety reasons...

An eliminated pilot may lodge a protest

Demonstration of new manoeuvres:

- During the selection rounds and with the authorisation of the Judges, a new manoeuvre (which is not defined in the official manoeuvres table) can and which could be included in the next season manoeuvres table can be d

Opportunities for judges during selection flight:

- to judge the level of the competitors and verify the pilots have the minimum required ability.
- to observe new manoeuvres for evaluation for the next season
- to train for scoring.

Scoring (see the computing table in annex)

The jury consists of 5 independent judges, one of them being chosen among the list of senior judges.

Technical scoring

Difficulty Points: Each manoeuvre has fixed difficulty bonus points in accordance with the manoeuvres' table:

	Officials manoeuvres	Difficulty bonus
1	Horseshoe (Shrimp)	1
2	Full stall	2
3	Spin	2
4	Tail Slide (Backwards flying)	3
5	SAT	3
6	Wing Over :	3
7	Asymmetric Spiral	3
8	Looping (Over-Turn / Inversion)	4
9	Dynamic Full stall	4
10	Asymmetric SAT (Dynamic SAT)	5
11	Twister (inversion of Spin)	5
12	Helicopter	7
13	Mac Twist	7
14	Misty Flip (Aschopper)	7
15	Tumbling	8
16	Rhythmic SAT (SAT to tumbling)	10
	Only Synchro manoeuvres	
17	Synchro Spiral	6
18	Pitch pendulum synchro (molineta)	6

Execution Points: Each manoeuvre is judged on a scale of 0 minimum to 10 maximum.

A zero score for "execution", will give zero "difficulty bonus points".

Synchronisation scoring:

The synchronisation of each manoeuvre is judged on a scale of 0 minimum to 10 maximum.

Scoring of Landing

Landing on the raft is an integral part of the competition.

It is important for the media and spectacular for the public.

However above sea water no landing point will be granted (to avoid equipment falling into salted water)

Each pilot's execution will be graded separately.

Landing for solo task

manoeuvre	Coefficient	Difficulty point	Comment
Landing on the raft:	5	0	10 points if the pilot remains on the raft, 5 point if the pilot ends in water after touching the

			raft
Ground spiral (solo)	5	4	0 /10 points (execution)
«spin»	2	0	
“touching water”	1	0	

Landing for synchro task

manoeuvre	Coefficient	Difficulty point	Comment
Landing on the raft:	5	0	10 points if the pilot remains on the raft, 5 point if the pilot ends in water after touching the raft
Ground spiral (solo)	5	4	0 /10 points (execution)
Synchro ground spiral	5	7	0 /10 points (execution)
«spin»	2	0	
“touching water”	1	0	

Scoring of Choreography

Choreography is scored for the entire run (including the landing).

The choreography score for solo takes into account criteria like:

- management of the descent
- flow, rhythm, connection
- originality, diversity

The choreography score for synchro takes into account criteria like:

- management of the descent
- flow, rhythm, connection
- originality, diversity
- Synchronisation co-ordination

Total Points:

For each run, each judge scores individually and gives 4 sets of points:

- Technical
- + Synchronisation
- + Landing
- + Choreography

The following percentage apply :

Solo :

- Technical : 75%
- + Landing : 5%
- + Choreography : 20%

Synchro :

- Technical 60%
- + Synchronisation : 20% ??
- + Landing : 5% ??
- + Choreography 15% ??

All the scores given by a judge must be on a 10 points basis

Each set of points must be averaged on a 10 points basis
This averaged score will be balanced with the percentages granted to this set of points and then the result will be multiplied by 10

Balanced average = average score x percentage x 10

Then all the different scores will be added to obtain a score based on 100. The score will be rounded to 2 digit after the point.

Example : *A pilote score given by a judge :*

Technical : 8

Landing : 5

Choreography : 7

The final score will be $(8 \times 75\% \times 10) + (5 \times 5\% \times 10) + (7 \times 20\% \times 10) = 76.50$

Difficulty bonus are added to the technical score of the judge according to the manoeuvres performed by the pilot. The value of these difficulty bonus can be found in the "Official Manoeuvres' Board"

The addition of the score given by the judge and the difficulty bonus give the total result for the task for each judge.

The final score of the run is the total of the 5 judges' scores to which the 2 extreme scores are removed keeping the 3 remaining

If only 4 judges are available, average the 2 extreme scores and consider this average score and the 2 remaining scores.

The general ranking is based upon the total scores of all runs by the team.

Criteria of technical evaluation: (see the manoeuvres' table)

The manoeuvres' table is the reference for the season.

Only the official manoeuvres defined in the manoeuvres' table can be scored in every run.

The manoeuvres' table includes for each manoeuvre.

The manoeuvre's **name** and its **difficulty** bonus points,

The **Criteria of technical evaluation** which is the reference for the execution score

The **imperative**: minimum requirements to validate the manoeuvre.

The **Penalties**: reference for minimum discount in execution scoring.

Penalties:

Collapses / Tucks: < 20%: -2 points for the manoeuvre
<50%: -5 points for the manoeuvre
>50%: -7 points for the manoeuvre

Change of direction:

<22.5°: -2 points
>22.5 : -5 points

>90° : -7 points

Cravate :

In case of a cravat, the jury appreciates the way the pilot manages the situation. Fast recovery and keeping the wing under control is required.

Cravat penalty: cravat <10% or <1 second : -2 points
 cravat >10% or >1 second: -5 points
 cravat >50% or >3 seconds: 0 to the manoeuvre

Twist :

In case of a twist, the jury appreciates the way the pilot manages the situation.

Twist <½ turn : -2 points
 <1 turn : -5 points
 >1 turn : 0 to manoeuvre

Loss of control / landing under the reserve / crash... 0 for the run.

World Aerobatics Pilot Ranking WAPR

The CIVL PR officer Paula Bowyer will keep a WAPR provided the following is met:

- The Aerobatics competition must be CIVL cat 2 sanctioned. The organiser has to contact the CIVL PR officer Paula Bowyer at the following address: paula@fai.org to obtain the dossier that requires:

- a sanction fee equivalent of one pilot's entry fee,
- the competition being put on the CIVL calendar one month before the event,
- the organiser to control that the pilots hold a valid FAI sporting licence

-To be valid for the WAPR the event must include a minimum of 10 Pilots holding a valid FAI sporting licence.

-To be valid for the WAPR the organiser must apply these rules

-The organiser must send to Paula Bowyer the results as soon as possible.

- the WAPR points will be determined on the pilot over all competition ranking according to the following grid. It is an individual ranking. No team ranking is planned in this WAPR.

Position	Points	Position	Points	Position	Points	Position	Points
1	100	6	56	11	25	16	6
2	90	7	49	12	20	17	4
3	81	8	42	13	16	18	3
4	72	9	36	14	12	19	2
5	64	10	30	15	9	20	1

Discard: After 3 competitions the worst result will be discarded, after 6 competitions the 2 worst results will be discarded and so on.

ORGANISER Rules

The site.

Aerobatics competitions can only take place above water. It is necessary to get a height of at least 500 m above water in order to perform the movement.

In case of a site above sea water, the organiser has to announce the altitude below which no manoeuvre will be authorised and will not be scored to allow the pilots to safely land on the ground landing field.

Take Off:

A necessary space to spread a minimum of 2 gliders. An unit of place, an easy access, easy and fast access for rescue. Possibility to use a winch (2 boats – 2 winches).

Landing.

It is necessary to have a “dry” landing. It is also possible to use a landing place on water (A protected floating platform without any sharp parts. Each side and corners must be well protected).

Wind socks must be posted at different places of the event.

Communication : Radios and / or mobile phones (homologated if necessary)

Site facilities

Reception of the public in a delimited area (A parking close to the event, catering, announcers).

No flight over the public.

Headquarters with all the infrastructure for the results keyboarding, a photocopy machine. and telephone lines.

Acrobatic area movements:

It is the pilot's responsibility to consider the strength of the wind and to estimate its drift in case of rescue opening so that he can land in water. The beginning of the routine will start at a minimum distance from the bank. The judges, the task Director and pilot committee fix the maximum strength of wind accepted during the competition.

Organisation team:

Continuous shuttles or cable car with priority to the competitors.

A task director who must be present at landing place.

At take off : A starter who is responsible of take offs and helped by 2 or 3 assistants.

At landing field : A controller of the movement area.

A speaker for public address.

A cameraman with a camera who is permanently filming. This person must be placed next to the jury.

A secretary who assists the Jury and helps entering the results (score keeper).

Briefing:

Pilot committee election (2 pilots). The pilot committee gives his point of view on the competition and particularly on all the aspects concerning safety.

Local rules:

The local rules must be published.

Weather forecast:

Weather forecast publication. At take off, information on the landing wind strength must be provided.

Safety :

A doctor-resuscitator on the competition area.

A permanent health cared helicopter on the competition area or one that should be available within 30 min.

An ambulance at take off and one at landing place.

2 motorised boats with an easy access for the pilots.

2 divers with a double autonomous system to breathe and a "cut – lines". In case of additional show at the event two extra boats should be provided.

Insurance :

Each organiser has to check if pilots have a liability insurance covering air risks.

Each organiser must have a liability insurance.

The Insurance third party liability coverage must be 700.000 Euros or equivalent

Media exposure:

The organiser should organise an event well suited to the media, at least at a national or local level.

Information should be given to the pilots about the broadcast dates on the different channels of the images of the competition.

Jury:

The jury is composed of 5 independent judges and it should be composed of at least 2 different nationalities. All the expenses of the jury are paid by the organiser (accommodation, catering and travel expenses).

These 5 members are chosen by the organiser among credible persons who have a good paragliding experience and if possible also in aerobatics. One of the members is chosen among a list of senior Judges

The jury and helpers (each Judge needs a secretary) must get together during the selection day in order to harmonise the notation and to organise the working method.

The Jury must sit at a suitable distance from each other to prevent them from talking to each other.

The Jury is responsible as well of the monitoring of the event particularly with regards to the safe and fair implementation of the rules.

Disciplinary action : The jury may take disciplinary action against a pilot who didn't respect the regulations or who executed some non controlled figures. The sanction can be a penalty and also the expulsion from the competition. The pilot has always the possibility to lodge an appeal against the jury decision in that case it is dealt with by the special Jury mentioned above.

LOCAL RULES

Name of the event:

Date including rained dates and Place:

Description of the event:

Open to teams and/or individuals

Number of competition days

Date of the selection days

Number of qualifying rounds and final if appropriate

Maximum number of pilots:

And selection method

Entry fee : amount

What is included in the entry fee

Protest fee :

Prize money Amount

How it is awarded

Daily program: this program has to be respected.

Safety: Type of helmet allowed in the competition

Provision for life jackets if any

Provision of spare reserve provided by the organiser

Competition: Definition of the flight Box

Number of manoeuvres to be performed during a flight

Elimination rounds and final whether appropriate