



CIVL 2016 PLENARY – ANNEX 3A TASK SETTING

The following text is summing up the work done during an informal meeting at the 2015 Belgrade CIVL Plenary. A Working Group was set but no discussion took part. The aim of this project is to develop a useful task setting handbook.

A – TASK COMMITTEE

Choosing the Task Committee

- At the moment random ballot. Popularity, doesn't really take account of how well those people know the area or task setting.
- Crucial to have the committee agree to a philosophy which is defined. (Is this a steward duty?)
- How to elect a committee.
- Do we think the current is good? Change? Pre-nominate? Develop pool?

Task Committee should set the task times for the best part of the day.

- How to work on-site.
- Who provides information.
- Who's responsible.
- Task setting Pool.
- Needs a handbook.

Select Committee:

- Get example tasks portfolio before (well before) the event.
- Organizers should nominate a local who knows the place, conditions, and tasks. Should work with the steward in the preparation phase to prepare the example tasks.
- At PG World Cup defined person from PWC organisation.
- Elections are good because it gives credibility.

Weather reports:

- Possibly have two sources? (Task committee should access their own weather.)

Comparing task “design” with what actually gets flown.

- Review what happened?
- Example Gimona. Slovenians wanted ridge out and back. (dangerous)
- Most important to set up a good start to avoid congestion.

People who should make up the task committee

- Meet Director.
- Local knowledge people. Organizers to define a local knowledge person (how will this be defined?)
- Others ?

Other elected members

- Coming after screening committee - Meet Director & Steward? Looks at pilot pool.
- Criteria to reduce field of selected pilots.
- Decide some criteria.
- Previous experience (general, and at-site).

- Keep a log/database of performance of task setters (for future comps, perhaps look at past).
- Ability to work with the team and find solutions to problems?
- Has read the handbook.
- Conflicts of interest (e.g. slow/fast glider favouring a particular flying style) to be dealt with by Meet Director declaring and prevent (e.g. top 5, Meet Director removes member, backup steps up).
- Reserve/backup committee member (perhaps could be “observer”).

Paragliding is the only sport where competitors decide what they do.

- What’s good - motivation, credibility.
- Bad? Top pilot maybe doesn’t make a good task for all.

We must have some possibility to change the task committee?

- Mechanism to do this. Disadvantage is that task committee might waste effort on “covering ass”?
- If huge conflict of interest (e.g. in the top 5 must step down, team place), but could also be solved by a declaration of conflict of interest prior to each task.
- Personal conflict with other members.
- Sickness/injury.

Compensations for the task committee members

(carrot to encourage participation)

- Able to take off anytime.
- Other compensations/priorities.

Task Committee preparation (can be/should be chosen before the comp?)

- Length, distance (part of goal of task setting).
- Data from previous comps.

B – TOPICS

1. Goal of task setting (ideal task, priorities, failures)
2. Enhancing the Sporting aspect (part of goal of task setting)
3. Constraints (weather and other constraints)
4. Designing a start
5. Goals
6. Course choices and variations/tactics
7. Typical failures
8. Collecting data and evaluation (specific person, metrics for evaluation)

1. Goal of task setting (ideal task, priorities, failures)

Enhancing the sporting aspect (part of goal of task setting).

- Where : e.g. out and return (no retrieve time) or one-way. Retrieve time is a factor in fatigue - > safety).
- Time: Total time from takeoff to arriving back at HQ < 8hrs (average - some days longer, some shorter, next day poor forecast etc.)? Do we have evidence/data on fatigue limits?
- Take into account the physical abilities of the competitors.

Comment 1: calculation of time available based on weather

- Optimum task is tactically difficult with 30-50% in goal. Use the available time best
- e.g. in Switzerland we have start at 1pm, and Cb at 5pm. Bad pilots fly this time anyway.
- The task should get more difficult in the middle – the Crux (to separate the good from

- the bad, and avoid a bunch up at the end).
- The task should not be difficult at the end.
- Crux between 30-70% of the distance. To allow separation.

Comment 2: Task should be defined around the available time rather than just about km.

- Time available (sun, weather) or,
- Ability of pilots to fly safely (3-5 hrs?) = 2 1/2 hours for the winners?
- Which part of the task should be the Crux? (see above)

Comment 3 : Winners time will show how fast it can be done.

- This is the reference point. If only 1 hour, too short, too few decisions, too much random influence.
- Other factors also influence the flying time (will the retrieve be huge - making for fatigued pilots - > safety?)

Also...

- Traditional ways of thinking (failures in task setting)? (see also below)
- Km lusted instead of emphasizing desirable time.
- Progressively harder task means bunching at the end.

2. Constraints

- Airspace (lateral - keep away, must provide file with waypoints) make it easy in proximity to the airspace so that pilots will be able to avoid. Preparation of the task committee can avoid some of this.
- Unsafe areas: no landings or turbulent areas)...
- Weather: wind, Cb, instability, convergence...
- Useful time (see above).
- Retrieval: difficult areas and time.
- For the future... Changing the task in real time (to avoid danger area; to avoid a stopped task).
- Avoid : ridge racing (better to have points out of the ridge in the valley and back) and "safety turn points".

3. Designing a start

Factors:

- wind,
- topography,
- number and level of pilots,
- ceiling,
- house thermals (size), distribution of lift,
- potential of the take off on a day (enough time for all to get a fair start, especially small launches), size, weather (light cycles, strong cycles, etc.),
- site history of other tasks.

Objectives:

- split up the gaggles before the start by making multiple options,
- multiple start options in terms of places to wait.

Avoid:

- doubling back after the start or any turn point (head on flying is dangerous!).

Comments:

- diagram - e.g. break up the start using entry cylinder plus optimum location of house thermals and wind to provide high risk high payoff location and low risk low payoff areas.

- This above works sometimes, but is not foolproof.
- Possible use of concentric cylinders.
- Use huge cylinders to make a start “line” (entry or exit) then continue to turn point.

4. Goals

Preparation: make sure goals are safe

- Define the approaches for safety.
- What are the typical afternoon winds at goal (headwinds means speed bar, tailwind means stupid landings)?
- Bad: upwind final glide over non landable terrain!
- Think about turbulence.
- Define the End of Speed Section (ESS) so that people are needing at least some minimum height?
- If the ESS is too big, people may end up searching very low for a last thermal inside the ESS, maybe over unsafe areas.
- Recommend 2 km ESS but is dependent on local conditions and terrain and wind.

Preparation: actual measurement of the goal field altitude
(if using google earth, add a safety margin!)

Caution when defining a new goal field because there may be unknown hazards.

Conical ESS: maybe in the future when the altitude accuracy is fixed. 3:1 seemed less bad...

5. Setting tasks to encourage multiple course choices and variations/tactics

(see above) for:

- easy start,
- difficult in the middle,
- easier end (to spread times more),
- split up the gaggles and give scope for route choice to be a winning factor (not just speed)
- Set task for multiple possible route options. The optimum route should not be obvious.
- Avoid doubling back!
- Maybe have safety committee present (but with minimum interruption) at task setting.

Comments:

- Split hole course: concentric cylinder turn points set on a straight line, means 2 route choices around the split hole.
- Recommend to the organizer to set a number of turn points around the boundary of the flying area, to be used for big radius cylinders.
- No ridge racing

6. Typical failures in task setting

- Design task around km. Km lust... (too much fatigue).
- Insufficient time between window open and race start (unfair for some).
- Allowing pilots to launch immediately without delay after briefing (as long as safety and fairness are not compromised). Caution with small launch (queue, rushing), or difficult day (fairness). Other factors? Requires care by Meet Director. Always count the time from the 15 minutes point with respect to fair time from open launch to open window!
- Setting tasks to display paragliding to the media or spectators etc., rather than the

- agreed objectives (see above).
- Start gates less than 15 minutes long (because it makes an elapsed time).
 - No options for a pilot to choose a different route (just get a big gaggle all the way).
 - Experimenting with new stuff in Cat 1.
 - Setting tasks not supported by all instruments.
 - Failure or delay to cancel / stop when conditions are getting dangerous.
 - Setting a too long / lucky / too short task for whatever reason (validating comp, showing off km, showing off area, etc.). Especially common on the last day!
 - Not anticipating bad conditions and rushing to change at the last minute (hence do prepare a backup task to avoid this, especially change of radius. Back-up task board?).
 - No finger pointing by one task committee or Meet Director after a failed task.

7. Collecting data and evaluation

How to improve future tasks...

- Task committee should review the previous day's task to find lessons learned.
- Can the Jury be usefully employed to collect data/opinions from pilots? (Definitely could help pilot attitude to Jury).
- Canadian restaurant buttons (good / bad / indifferent / dangerous).
- Accident / incidents (past comps also!) - Info to task committee.
- What metrics for evaluation?

8. Possible future task types

(not yet for Cat 1's but would be good to ensure support in FS for proper trialling in Cat 2's)

- Assigned area tasks (AAT).
- Maybe other turn point options for the future? Different shapes? Square, line?
- Concentric cylinders.
- Parallel lines.
- Split hole tasks (Need to draw a diagram, uses two concentric turn points along the line between two other turn points. Pilots must choose to go to one side or the other.)
- Optional turn points (explicitly makes route options).