

14.11 Section 4C Volume F3 - RC Soaring

F3B – RC Multi-Task Gliders

a) 5.3.1.3. Characteristics of Radio Controlled Gliders F3B Germany

Add a minimum wing-loading in line 3:

a) Maximum surface area	150 dm ²
Maximum flying mass	5 kg
Wing-Loading (including wing and elevator area)	32 to 75 g/dm ²
Minimum radius of fuselage nose template)	7.5 mm (see

Reason: By introducing the altimeter in Task A-Duration to make it more selective it is necessary to fix a minimum wing-loading to prevent models with significant less mass than nowadays because these models will become much more expensive. (example in class F5J with a minimum wing-loading of 12g/dm²)

The report “Duration task F3B is not selective enough” including some proposals who to save this problem which was posted some weeks ago to 150 F3B-pilots worldwide and to all members of the SC-soaring.

b) 5.3.1.7 Cancellation of a Flight and Disqualification Germany

Strike out and add some words in line 1 and 2; add some words in line 3 and 4; strike out line 4-7:

b) The flight in progress ~~will be penalised with 100 points~~ **is annulled and recorded as a zero score** if the model aircraft loses any part either during the launch, ~~or~~ during the flight, except when this occurs as the result of a mid-air collision with another model aircraft or towline, **or during the landing**. ~~The loss of any part in a collision with another model aircraft or during landing (i.e. in contact with the ground) is not taken into account. The penalty of 100 points will be a deduction from the competitor’s final score and shall be listed on the score sheet of the round in which the penalisation was applied.~~

Reason: If a model loses any part during launch, flight should be penalized with a zero-score like in F3J (see 5.6.5.1.b)). For both classes this would be also necessary for the landing to try to reduce the “stick-landings”.

c) 5.3.1.11 Weather Conditions / Interruptions (new paragraph) Germany

Add a new paragraph:

5.3.1.11. Weather Conditions / Interruptions

a) The maximum wind speed for F3B contests is twelve (12) m/sec. The contest has to be interrupted or the start delayed by the contest director if

the wind speed exceeds twelve (12) m/sec measured three (3) times for at least twenty (20) seconds in a time interval of five (5) minutes two (2) metres above the ground at the start and landing area.

b) **In the case of rain, the contest director can interrupt the contest during task A and task B. When the rain stops, the contest starts again with the group that was flying, which receives a re-flight.**

c) **In the case of rain, the contest director must interrupt the contest during task C. When the rain stops the contest start again with the pilot that was flying, which receives a re-flight.**

The whole group of task C must be divided in three (3) or four (4) groups depending on the total number of competitors before the task starts. If the weather is stable only one group is evaluated; if the competition must be interrupted more than thirty (30) minutes than the interrupted group must start from the beginning and the results are evaluated for each group.

Reason: Especially for F3B the new paragraph 5.3.1.11. “Weather Conditions / Interruptions” is very important because there is a big difference at rainy weather between the tasks A/ B and task C.

The paragraph B.15.1.a) i) can stay as it is written but the special rules for the Soaring Classes are implemented to the specific rule in the rule book.

Technical Secretary Note: Weather conditions/interruptions has been deleted from the CIAM GR volume for 2017.

d) **5.3.2. Rules for Multi-task Contests** **Germany**

Amend the sub-paragraph b) as shown below:

5.3.2.1. Definition

a)

b) The combination of task A, B and C constitutes a round. A minimum of ~~two~~ rounds **one (1) round and one (1) task must be flown that the competition is valid.** ~~Except at World and Continental Championships the last round may be incomplete, i.e. only one task or any combination of two tasks. In the case of a The result of a World or Continental Championships each competitor is entitled a minimum of five rounds subject to the provision of rule B.13, Section 4B. is valid if five (5) complete rounds are flown; if more than five (5) complete rounds are flown, see paragraph 5.3.2.8. Classification. At the discretion of the ~~organiser~~ **contest director** any task may be flown first in a scheduled round.~~

c)

Reason: Two complete rounds are too much for big competitions and bad weather conditions; one round and one task are the right value. The minimum of five complete rounds should be also valid for a Continental Championship.

e) **5.3.2.3.b) Task A - Duration** **Germany**

Add text in sub-paragraph 5.3.2.3.b) as follows:

5.3.2.3. Task A - Duration

a)

b) One point will be awarded for each full second from the time the model aircraft is free flying to the time the model aircraft comes to rest **on the defined flying site**, up to a maximum of 600 points (i.e. 10 minutes maximum), for each full second of flight within the working time; **if the model does not land on the defined flying site the whole flight is zero**. No points will be awarded for flight time in excess of working time. The free flying of the model aircraft commences when the model aircraft is released from the towline.

Reason: Normally the model lands on the defined flying site because the landing spots are in this area. If for what reasons ever the model lands outside the defined flying site the result of this flight must be zero. A radio controlled model must come back to the area from where it has been started.

Please read the rules from F3K 5.7.3. Definition of the flying field

f) 5.3.2.3.d) Task A - Duration

Germany

Add the table from F3J 5.6.10.5. as shown below – delete the existing table:

d) Additional points will be awarded for landing, depending upon the distance from the spot marked by the organizer, according to the following table:

Distance from spot [m]	Points	Distance from spot [m]	Points
up to meter		up to meter	
0,2	100	5	80
0,4	99	6	75
0,6	98	7	70
0,8	97	8	65
1,0	96	9	60
1,2	95	10	55
1,4	94	11	50
1,6	93	12	45
1,8	92	13	40
2,0	91	14	35
3	90	15	30
4	85	Over 15	0

Reason: There is no sufficient differentiation in the results of F3B task A - Duration because the distribution of the landing points is too rough.

At the moment we try additionally to find a solution concerning the flight time; but the step changing the distribution of the landing points would be a first step in the right direction.

g) 5.3.2.3. Task A-Duration with Altimeter

Germany

Add 2 words in the heading as shown above:

Reason: By introducing the altimeter in Task A-Duration to make it more selective it is necessary to adapt the heading. The report “Duration task F3B is not selective

enough” including some proposals who to save this problem which was posted some weeks ago to 150 F3B-pilots worldwide and to all members of the SC-soaring.

h) 5.3.2.3. Task A-Duration with Altimeter Germany

Add paragraph f), g) and h) as shown:

f) The recorded start altitude in metres shall be rounded down to the nearest metre.

g) Each metre of the recorded start altitude results in a deduction of half (0,5) a point / metre.

h) Where the score is negative (below zero), a zero score will be recorded. Note that any penalty points applied in the round will remain effective.

Reason: By introducing the altimeter in Task A-Duration to make it more selective it is necessary to introduce the necessary explanations. The report “Duration task F3B is not selective enough” including some proposals who to save this problem which was posted some weeks ago to 150 F3B-pilots worldwide and to all members of the SC-soaring.

Technical Secretary Note: The section 5.3.2.3. already contains sub-paragraph f), so these sub-paragraphs if accepted will be numbered g), h) and i).

i) 5.3.2.3. Task A-Duration with Altimeter Germany

Add a new paragraph 5.3.2.3.1. Technical equipment:

5.3.2.3.1 Technical equipment

a) Each model must be fitted with a tow-hook with sensor which measures the release of the tow-line.

b) Additionally each model must be fitted with an approved AMRT in accordance with the Technical Specification published in F3B Altimeter Technical Documentation.

The essential function of the AMRT is to record and display the maximum altitude attained (start altitude), above a ground level reference between the beginning and after ten (10) seconds from the release of the tow-line.

Installation of the AMRT in the model shall be in accordance with the requirements as detailed in the Technical Guidance Documentation.

c) Proper operation of the AMRT including any associated display and its compatibility with other control equipment installed in the model is the responsibility of the individual competitor.

d) To facilitate initial technical processing, all AMRTs must be easily removable for compliance checking.

The receiver command signal connection to the AMRT must be easily accessible so that at any time during the competition the organisers have the option of installing a monitoring AMRT via a branching Y lead.

To enable the timekeeper to record data required for scoring purposes there must be easy access to the display or the connector for a plug in display. It

must not be necessary to disconnect the AMRT from the receiver or to remove it from the model,

The use of an additional extension cable is permitted for connecting the display. It is the responsibility of the competitor to ensure that any incorrect connection does not result in damage to the AMRT or the display.:

Reason: By introducing the altimeter in Task A-Duration to make it more selective it is necessary to describe the needed technical equipment. The report “Duration task F3B is not selective enough” including some proposals who to save this problem which was posted some weeks ago to 150 F3B-pilots worldwide and to all members of the SC-soaring.

j) 5.3.2.4.c) Task B - Distance Germany

Add words in sub-paragraph c) as shown:

c) A visual system or a combined audiovisual system announces to the competitor when his model aircraft crosses the Base A or Base B (imaginary vertical planes). The absence of a signal will indicate that the model aircraft has failed to correctly cross the base. The instruments used to check the crossing of the vertical planes must assure the parallelism of such planes. Timing and signalling shall occur when any part of the **complete** model aircraft **in flight** crosses the base. If an audiovisual system is used, signalling is also valid when the audio system fails.

Reason: Any part means that this is a part of a complete model in flight, but not any part of a crashed model.

k) 5.3.2.4.d) Task B - Distance Germany

New wording for 5.3.2.4.d):

~~d) The model aircraft must be identified by the contest director or the flight-line manager to the judges at Base A and B during the launch. For this procedure the competitor or his helper must announce clearly the intention to start by calling their allocated signal (alpha, bravo, charly delta, echo or foxtrot). When he receives permission from the contest director or the flight-line manager to start, he must do so immediately otherwise another competitor will receive permission to start. If a competitor starts without official permission he will be called back and must land and again request permission to start.~~

d)The models will be identified by flags of different colours for each competitor in the group. When the competitor intends to start his helper waves the flag; when the model is identified by the associated helpers at base A and base B they wave the flag with the corresponding colour as well. At that moment the pilot can launch.

The competitor must stay within a distance of 10 metres either side of Base A during the timed flight.

Reason: The advantage of this system is, that the competitor can start at the moment he intends to start and must not wait for the permission of the flight-line manager.

l) 5.3.2.4. f) Task B - Distance **Germany**

Strike out some words in sub-paragraph 5.3.2.4. f) in line 2, 3 and 4 and add some words in line 2 and 3:

e)

f) After having completed the task, the model aircraft must land ~~in the area(s) determined by the contest director outside the safety area(s)~~ **on the defined flying site** otherwise the flight will be penalised with 100 points **is zero**. The penalty of 100 points will be a deduction from the competitor's final score and shall be listed on the score sheet of the round in which the penalisation was applied.

Reason: The model must land on the defined flying site from where it has been started. If for what reasons ever the model lands outside the defined flying site the result of this flight must be zero. A radio controlled model must come back to the area from where it has been started.

Please read the rules from F3K 5.7.3. Definition of the flying field.

m) 5.3.2.5. c) Task C - Speed **Germany**

in sub-paragraph c) add a sentence in row two:

a)

b)

c) The flight time is recorded to at least 1/100 **sec** when in flight the model aircraft first crosses Base A **at the predetermined side of the safety-plane** and completes four legs of the 150 metre course.

d)

Reason: In the actual wording it is not clearly stated on which side of the safety plane the counted flight has to be performed.

n) 5.3.2.5. d) Task C - Speed **Germany**

Add words in sub-paragraph d) as shown:

d) An audio system will inform the competitor when the model aircraft crosses the Base A or Base B (imaginary vertical planes). The absence of a signal will indicate that the model aircraft has failed to correctly cross the Base. The instruments used to check the crossing of the vertical planes must assure the parallelism of such planes. The signal is given when any part of the **complete** model aircraft **in flight** crosses the base. The source of the signal (horn, loudspeaker) must not be further than 30 metres away from the intersection of base A and the safety plane.

Reason: Any part means that this is a part of a complete model in flight, but not any part of a crashed model.

o) 5.3.2.5. f) Task C - Speed **Germany**

Strike out some text in paragraph 5.3.2.5. sub-paragraph f) and add words as shown:

e)

f) After having completed the task, the model aircraft must land in the area(s) ~~determined by the contest director outside the safety area(s)~~ **on the defined flying site** otherwise the flight will be penalised with 100 points **is zero**. The penalty of 100 points will be a deduction from the competitor's final score and shall be listed on the score sheet of the round in which the penalisation was applied.

Reason: The model must land on the defined flying site from where it has been started. If for what reasons ever the model lands outside the defined flying site the result of this flight must be zero. A radio controlled model must come back to the area from where it has been started.

Please read the rules from F3K 5.7.3. Definition of the flying field.

p) 5.3.2.5. h) Task C - Speed

Germany

Amend sub-paragraph h) as shown by changing 'shall' to 'must' and making the other two changes as shown:

g)

h) During task C the timed flight shall **must** take place to **at the predetermined** one side of the safety plane, whilst all judges/time-keepers shall **must** remain on the other side of the safety plane. The side which is to be flown shall be indicated by the organisers **organiser** taking into account the direction of the sun, etc.

The flight will be penalised with 300 points, when sighted by means of an optical aid, the safety plane is crossed by any part of the model aircraft. The instrument used to check the crossing of the vertical safety plane must also assure that the safety plane is orthogonal to Base A and Base B. The penalty of 300 points will be a deduction from the competitor's final score and shall be listed on the score sheet of the round in which the penalisation was applied.

Reason: In the actual wording it is not clearly stated on which side of the safety plane the counted flight has to be performed. The wording "must" instead of "shall" is the more precise wording to express what the intention is.

q) 5.3.2.6. Partial Scores

Germany

Add a new formula for Partial Score a):

5.3.2.6. Partial Scores

For each task the winner of each group receives 1000 points.

a) Partial Score A for each competitor is determined as follows:

$$A = 1000 \times P1/Pw$$

$P1 = \text{Flight time [s]} - 0,5 \times \text{height start altitude [m]}$ (see 5.3.2.3.)

PW = points of the winner in the related group.

Reason: By introducing the altimeter in Task A-Duration to make it more selective it is necessary to adopt the calculation of the points. The report "Duration task F3B is

not selective enough” including some proposals who to save this problem which was posted some weeks ago to 150 F3B-pilots worldwide and to all members of the SC-soaring.

r) **5.3.2.9 Team Classification**

F3 Soaring Subcommittee

Add new heading and new paragraph Team Classification and renumber the paragraph 5.3.2.9. Site to 5.3.2.10. Site:

5.3.2.8. Team Classification

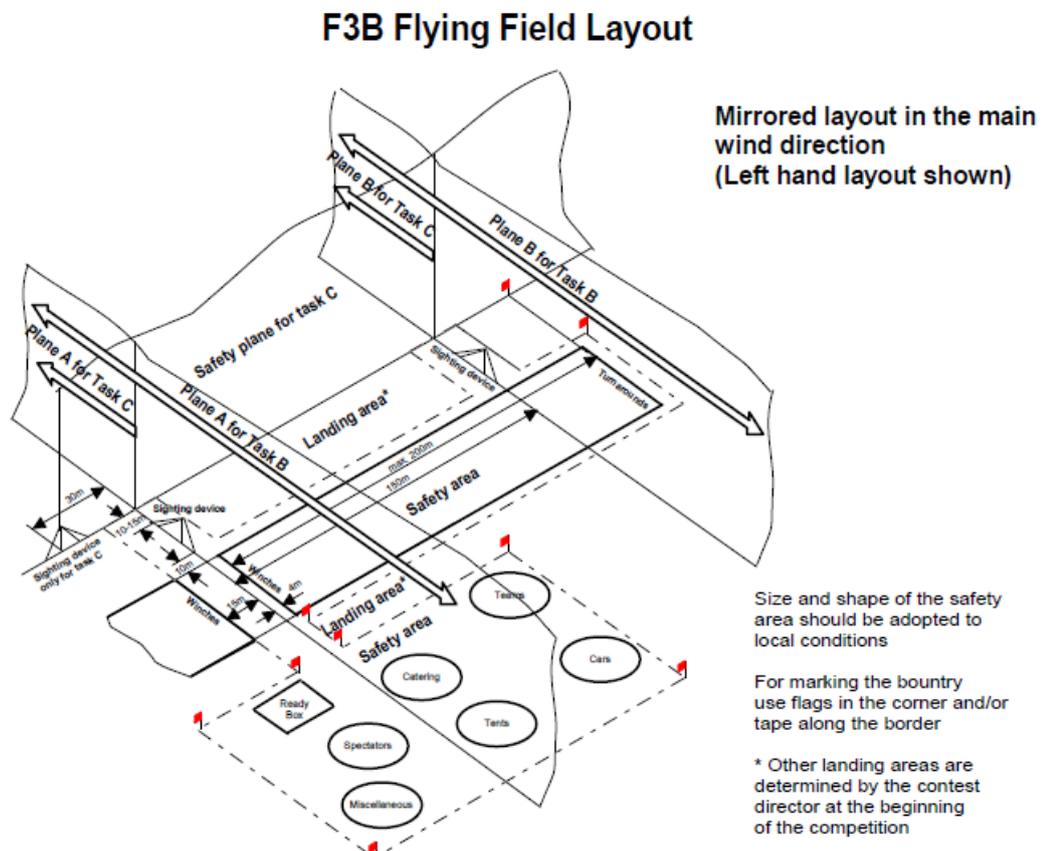
To establish the ranking for international team classification, add the final individual scores of three best members of the team. Teams are ranked according to the highest numerical score to lowest. In the case of a national team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.

Reason: The paragraph C.15.6.2. National Team Classification in Volume CGR offers two methods for team classification. In the volume containing the rules for the class one from these two options must be selected. Until now at all championships the sum of scores was used, but the written statement for class F3B was missing.

s) **5.3.2.9. Site**

Germany

New diagram of F3B Flying Field Layout:



Reason: It makes no sense that the setup is made before each task because the wind direction can change also during the task. That means that the conditions for all pilots are not equal at all; remember our sport takes place outdoor.

The most flying fields are mostly orientated in the main wind directions and are therefore not suitable for other wind directions, because they are not wide enough.

The correction of the course would be much trouble for the organizer and additionally wasted time at all.

The additionally changes should be an explanation at which side of the safety plane the different tasks must take place. See the proposal F3B 5.3.2.5.h). GER 2016.

Technical Secretary Note: *If proposal (r) is accepted, the above proposal (if accepted) becomes 5.3.2.10.*

F3J – Thermal Duration Gliders

t) 5.6.11.5. Team Classification

F3 Soaring Subcommittee

Add new paragraph 5.6.11.5. Team Classification:

5.6.11.5. To establish the ranking for international team classification, add the final individual scores of three best members of the team. Teams are ranked according to the highest numerical score to lowest. In the case of a national team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.

Reason: **Clarification.** The paragraph C.15.6.2. National Team Classification in Volume CGR offers two methods for team classification. In the volume containing the rules for the class from these two options one must be selected. Until now at all championships the sum of scores was used, but the written statement for class F3J was missing.

F3K – Hand Launch Gliders

u) 5.7.1. General

Germany

Amend this paragraph as shown below:

5.7.1. General

This event is a multitasking contest where the RC gliders must be hand-launched and accomplish perform specific tasks. ~~In principle the contest should consist of at least five rounds. The organiser may announce more rounds to be flown before the start of the contest. In certain situations (for example bad weather conditions) the jury may decide that fewer rounds than initially announced will be flown. In these cases, the number of rounds may be fewer than five and all the rounds shall be considered as the final result.~~

Reason: The minimum number of rounds should be clearly defined in paragraph 5.7.10 “Scoring”.

v) **5.7.5. Weather Conditions / Interruptions** **Germany**

Add a word to the heading and amend the paragraph as shown:

5.7.5. Weather conditions / Interruptions

The maximum wind speed for F3K contests is eight (8) m/sec. **The start of the contest must be delayed** or the contest has to be interrupted ~~or the start delayed~~ by the contest director ~~or the jury~~ if the wind speed exceeds eight (8) m/sec measured for ~~at least one minute~~ **three (3) times for at least twenty (20) sec in a time interval of five (5) minutes** at two (2) metres above the ground at the start and landing field. In the case of rain, the contest director ~~must immediately pause~~ **can interrupt** the contest. When the rain stops, the contest starts again with the group that was flying, which receives a re-flight.

Reason: The original wording says that for the “wind speed” the contest director or the jury are responsible for the “rain” only the CD.

My opinion is that for both only the CD is responsible. If the jury takes a wrong decision and there is a protest who should deal with this protest? In the “Jury handbook” is clearly stated that the jury should be independent and should only act if there is a protest.

The measurement of the wind speed with a simple anemometer over a time interval of one minute is too long.

Perhaps the better measurement procedure would be: Three (3) times over twenty (20) sec in a time-interval of five (5) minutes.

w) **5.7.7. Flight time** **Germany**

Add a restriction for maximum sum of flight times:

5.7.7. Flight time

The flight time is measured from the moment the model glider leaves the hands of the competitor until a landing of the model glider as defined in 5.7.6. or the working time expires.

The flight time is measured in full seconds. Rounding up is not applied.

The flight time is official if:

The launch happened from inside the start and landing field and the landing is valid according to 5.7.6. and the launch happened within the working time of the task.

This means that if the airplane is launched before the beginning of the working time then that flight receives a zero score.

In those tasks, where maximum or target flight times are specified, the flight time is scored up to this maximum or target flight time only. **The sum of all flight times per task must not be greater than the working time minus the number of valid landings in seconds.**

Reason: With the truncation of flight times to full seconds and normal timing accuracy it is only theoretically possible to “lose” less than 1 second per turnaround (hand landing and immediate relaunch). Pilots sometimes still claim total turnaround

times of 4s in task G (5x2min), for example. The addition to the rule effectively prevents that luck or cheating factor.

x) **5.7.10. Scoring** **Germany**

Replace the full sentence.

5.7.10. Scoring

~~Each competitor must fly at least 3 rounds which have to be completed in order to get a valid final score.~~

A minimum of five (5) rounds with different tasks must be flown that the competition is valid.

Reason: Valid wording that a minimum of five rounds must be flown (see 5.7.1. General) that the results of a competition are valid.

y) **5.7.10.1 Final Score** **Germany**

Amend the sub-paragraph as shown below to clarify:

5.7.10.1. Final score

The final score is the sum of **the** normalised scores of **all** rounds minus penalty points.

If **five** (5) or more rounds are flown then the lowest score is dropped.

~~Penalty points must be shown in the results list with an indication of the round in which they were levied.~~

The penalty points will be a deduction from the competitor's final score and shall be listed on the score sheet of the round in which the penalisation was applied.

The penalty points are retained even if the score of the round in which the offence occurred is dropped.

Reason: Clearer wording.

z) **5.7.10.4. Team Classification** **F3 Soaring Subcommittee**

Add new paragraph 5.7.10.4 Team Classification.

5.7.10.4. Team Classification

To establish the ranking for international team classification, add the final individual scores of three best members of the team. Teams are ranked according to the highest numerical score to lowest. In the case of a national team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.

Reason: **Clarification.** The paragraph C.15.6.2. National Team Classification in Volume CGR offers two methods for team classification. In the volume containing the rules for the class from these two options one must be selected. Until now at all championships the sum of scores was used, but the written statement for class F3K was missing.

aa) **5.7.11. Definitions of tasks**

Denmark

Add a sentence to the Task C definition as shown below:

5.7.11.3. Task C (All up, last down)

All competitors of a group must launch their model gliders simultaneously, within 3 seconds of the acoustic signal. The maximum measured flight time is 180 seconds.

The official timekeeper takes the individual flight time of the competitor according to 5.7.6 and 5.7.7 from the release of the model glider and not from the start of the acoustic signal. Launching a model glider before or more than 3 seconds after the start of the acoustic signal will result in a zero score for the flight.

The number of launches (3 to 5) must be announced by the organiser before the contest begins.

The preparation time between attempts is limited to 60 seconds after the end of the landing window. During this time the competitor may not perform test flights.

The competitor is not allowed any help during the flight testing time, working time or landing window.

The flight times of all attempts of each competitor will be added together and will be normalised to calculate the final score for this task.

No working time is necessary.

Reason: The reason is to make the task harder. The pilot must rely only on his own input and knowledge, and the pilot must fly this task on his own. It has been used to good effect in Germany at, among other contests, the “Vest Pokal” contest for some years (Ulrich Freitag). Since everybody launches at the same time and lands without a sudden relaunch, there will be no safety issues with this change in this task.

ab) **5.7.11. Definitions of tasks**

Denmark

Add and delete text to the task definition for Task E as shown below:

5.7.11.5. Task E (Poker - variable target time)

Each competitor has an unlimited number of flights to achieve or exceed up to five target times. Before the first launch of a new target, each competitor announces a target time to the official timekeeper. He can then perform an unlimited number of launches to reach or exceed, this time.

If the target is reached or exceeded, then the target time is credited and the competitor can announce the next target time, which may be lower, equal or higher, before he releases the model glider during the launch.

If the target time is not reached, the announced target flight time can not be changed. The competitor may try to reach the announced target flight time until the end of the working time. ~~Towards the end of the working time, the competitor must still announce a real time specified in minutes and/or seconds. Calling only "until the end of the working time" is not permitted.~~

For the competitors last flight he may announce “end of working time”. For this specific call the competitor has ONLY one attempt.

The target time must be announced clearly in the official contest language or alternatively shown to the timekeeper in written numbers (e.g. 2:38) by the competitor's helper **immediately after the launch.**

If the competitor calls “end of working time” the competitor’s helper writes the letter “W”.

The target(s) (1 - 5) with achieved target times are scored. The achieved target times are added together.

This task may be included in the competition program only if the organiser provides a sufficient number of official timekeepers, so that each competitor in the round is accompanied by one official timekeeper.

Working time is 10 minutes.

Reason: The reason is to add the possibility of making a nonspecific call “To the end of the working time” as either the ONLY (=first AND last) or the LAST call.

When the working time is approaching the end, pilots and helpers tend to look at the official clock and either say that time minus 1-2-3 seconds when they launch OR saying something in a language foreign to the official timekeeper, and lets the pilots helper write the time shown on the official clock at launch minus 1 second.

This rule change about making “end of working time” a valid call once, removes this subtle cheating, and sets everybody equal.

At the last 2 World Championships a “local rule” with a maximum of 9:58 total for this task has been introduced, to remove the possibility of a “hitting the button on the clock” mistake from the official timekeeper that can lead to a 0-score.

Introducing the call “end of working time” / written call “W” removes the need for a maximum called time for this task, since the previous (local rule) call 9:58 now will be substituted by “end of working time”.

F3F – Slope Soaring Gliders

ac) 5.8.14. Team Classification

F3 Soaring Subcommittee

Add new paragraph 5.8.14. Team Classification.

5.8.14. Team Classification

To establish the ranking for international team classification, add the final individual scores of three best members of the team. Teams are ranked according to the highest numerical score to lowest. In the case of a national team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.

Reason: **Clarification.** The paragraph C.15.6.2. National Team Classification in Volume CGR offers two methods for team classification. In the volume containing the rules for the class from these two options one must be selected. Until now at all championships the sum of scores was used, but the written statement for class F3F was missing.

Volume F3 FPV Racing begins overleaf