

# F3 - RC Soaring

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## F3B Multi-Task Gliders

a) **5.3.1.3. Characteristics of Radio Controlled Gliders** **Germany**

*Amend paragraph d) as follows:*

Any device for the transmission of information from the model aircraft to the competitor is prohibited, **with exception of signal strength and voltage of the receiver battery.**

Reason: **Urgent Clarification.** Almost every 2.4 GHz system transmits automatically status data back to the transmitter. These data are signal strength of the receiver, receiver battery voltage. The transmission of this status data cannot be switched off on almost every 2.4 GHz system.

As the rule was written the intention was to forbid the transmission of for example the actual height (vario), speed of the plane, in general: flight data of all kind.

To have information about the signal strength of the received signal is a safety issue and should be allowed.

The rule at the moment forbids most of the new innovative 2.4 GHz systems.

b) **5.3.2.2. Launching** **Germany**

*Amend paragraph o) as follows:*

o) There must be a quick release mechanism on the power lead to the battery in order to remove power from the motor in an emergency. (Connections to the battery must be removable without the need for tools). **If slotted pole shoes are used both of them have to be slotted.**

Reason: **Safety.** If only one slotted pole shoe is used nobody can see in the case of an emergency which one is slotted and which one is not slotted.

c) **5.3.2.4 d) Task B – Distance** **Belgium**

not recommended

d) **5.3.2.4. Task B – Distance** **Germany**

*Amend paragraph c) as follows:*

c) ~~An audio~~ **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 model aircraft crosses the base. If an audiovisual system is used, signalling is also valid when the audio system fails ~~or vice-versa.~~

Reason: **Urgent Clarification.** The experiences at some competitions have shown, that it is always possible to fly only with visual (optical) signals, but sometimes it is very difficult till impossible to fly only with audio (acoustical) signals. The reason is

that mostly electronically produced audio signals are used; they have mostly an equal loudness and differ not very much, especially when some of these signals sound at the same time. If there is a combination of electronically produced signals and a buzzer, a horn or an electrical bell, then we have no equal treatment for all competitors because it is much easier to identify a buzzer, a horn or an electrical bell. Visual signals like headlamps in addition with different colours can be identified very clearly by everybody.

If an audiovisual system is used it is practice that every pilot has a helper who looks on the optical signal. In the future the primary system should be a visual system; this system can be combined with an acoustical system, but if the visual system fails the competitor can claim a reflight.

e) **5.3.2.5. Task C - Speed** **Germany**

*Amend paragraph f) as follows:*

f) After having completed the task, the model aircraft ~~can~~ **must** land anywhere **in the area(s) determined by the contest director** outside the safety area(s).

Reason: **Urgent Clarification.** The wording “anywhere” is not precise enough.

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## **F3J Thermal Duration Gliders**

f) **5.6.1.3. Characteristics of Radio Controlled Gliders** **Germany**

*Amend paragraph c) as follows:*

c) Any ~~device for the~~ transmission of information from the model aircraft to the competitor is prohibited, **with exception of signal strength and voltage of the receiver battery.**

Reason: This is exactly the same amendment as for proposal a) (F3B) in this section with the same reasons.

g) **5.6.11. Final Classification** **Germany**

*Amend paragraph 5.6.11.1. a) as follows*

If ~~five (5)~~ **seven (7)** or less qualifying rounds are flown, the aggregate score achieved by the competitor will be the sum of his **these** scores for ~~these five rounds-~~ **all rounds flown.** If more than ~~five~~ **seven** rounds are flown, then his **the** lowest score will be discarded before determining his **the** aggregate score.

Reason: F3J competitions in recent years are run with way more accuracy and expertise than at the date this rule was invented. Pilots flying and tactical skills as well as their equipment reached better efficiency by far. In most of the 2 day events on international level 6 preliminary rounds are flown. Under normal or even “good” weather conditions this leads to very little differences in the scores as well as to more risky flying. Pilots knowing they will be able to discard a bad score in the end are taking much more risk. With the worst result being discarded the differences in scores are getting tighter. The only way to get a greater variation of scores in these conditions is to set the limit of rounds flown until the worst score will be discarded higher.

h) **5.6.2.4 Safety Rules** **Czech Republic**

*Replace the paragraph 5.6.2.4*

- a) ~~No part of the model aircraft must land or come to rest within the safety area.~~
- b) ~~The model aircraft must not be flown at low level (below 3 meters) over the safety area.~~
- c) ~~Every single action against the safety rules will be penalised by deduction of 100 points from the competitor's final score. Penalties shall be listed on the score sheet of the round in which the infringement(s) occurred.~~

Amended:

- a) **Contact with an object within the defined safety area (including the launch corridor) will be penalised by deduction of 300 points from the competitor's final score.**
- a) **Contact with a person within the defined safety area (including the launch corridor) will be penalised by deduction of 1000 points from the competitor's final score.**
- b) **For each attempt only one penalty can be given, if a person and at the same attempt an object is touched the 1000 points penalty is applied.**
- e) **Penalties shall be listed on the score sheet of the round in which the infringement(s) occurred.**
- f) **If necessary the organiser may define a part of the airspace as safety space. In such case he must appoint at least one official who observes the border (vertical plane) by a sighting device. This official must warn the pilot if his glider crosses the border. If the glider doesn't leave the safety space immediately a penalty of 300 points is given.**

Reason: The present 3 meter level is very difficult to judge and causes often discussions and even protests. The safety space was already applied as local rule.

i) **5.6.3. Contest Flights**

**Czech Republic**

*Amend paragraph b) as follows:*

- b) The competitor will be allowed ~~two attempts at each official flight~~ **an unlimited number of attempts during the working time.**

Reason: There is no serious reason for limiting the number of attempts. Any new attempt means shorter time space for flying, therefore the competitor is automatically penalized by repeating any attempt. Beginners are often stressed by the present limit.

j) **5.6.5. Cancellation of a flight and/or disqualification**

**Germany**

*Add a second paragraph as follows:*

**5.6.5.2. Neutralization of a flight group (only for fly-off rounds)**

**During the fly-off rounds only within the first 30 seconds of the working time the Contest Director has the right to neutralise the ongoing flight group in events leading to a reflight according to 5.6.4 a) – e).**

**If an event according to 5.6.4.a) – e) occurs within the first 30 seconds of the working time, the Contest Director needs to:**

**state the immediate neutralization of the group clearly to all competitors;**

**stop the running working time;**

**call all competitors to land as soon as possible.**

**This round will be started again with the preparation time as soon as possible.**

Reason: In fly-off rounds the only way of handling a reflight is to re-fly the whole group (and thereby round). This mostly leads to a disadvantage for competitors claiming a reflight for all others already might have a valid and good score so that they can do the reflight taking higher risk getting even a better score. Lots of reflights are given due to events happening in the phase of launching. By

neutralizing the group within the first 30 seconds there will be no disadvantage by scores for competitors who would have needed to claim a reflight. Even by neutralizing the group and not waiting until the ongoing working time is finished the organizer can save time.

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## F3K Hand Launch Gliders

### k) 5.7.3.2 Start and landing field

Germany

*Amend paragraph 3 as follows:*

~~Competitors may leave the start and landing field while flying their model glider, but starting, landing, and catching the model glider must only occur within the start and landing field.~~

**Competitors may leave the start-and-landing field while flying their model glider. For starting their model glider and in order to achieve a valid landing (see 5.7.6.2) the competitor must be inside the start and landing field.**

Reason: For a better view of the model under difficult conditions, e.g. flying far away, the common practice of F3K pilots is to follow their model after launching it to better see the reactions of the model. The current rule is not precise where the pilot should be, outside or inside the start- and landing field. The additional explanation shall clarify where the pilot has to stand when landing the model in the start- and landing field.

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# F6D Hand Thrown Gliders

## j) 6.4.1. General

Czech Republic

*Add sub-paragraph numbers throughout.*

*Example*

**6.4.1.1** A contest where ...

**6.4.1.2** The organiser should ...

Reason: Add sub-paragraph numbers for better orientation when reading the Code.

## k) 6.4.2. Definition of hand thrown gliders

Czech Republic

*Amend paragraphs as follows:*

**6.4.2.2** The hand thrown glider must be launched by hand and are controlled by radio equipment acting on an unlimited number of surfaces. **Transmission of information connected with flight (speed, vario etc) from the glider to pilot are not allowed.**

**6.4.2.3** The hand thrown glider can be equipped with holes, pegs or reinforcements, which allow better grip of the model aircraft by hand. The pegs must be stiff and remain a firm part of the model, neither extensible nor retractable. Devices, which do not remain a part of the model during and after the launch, are not allowed. **Any loss of part of the model results in zero for the flight.** Reason: Add specification based on current practice.

## l) 6.4.3. Definition of the flying field

Czech Republic

*Amend the paragraph as follows:*

**6.4.3.2** ~~A typical launching and landing area could be a rectangle 100m x 50m oriented with longer side perpendicular to the wind direction.~~ **Each pilot has assigned a launching and landing area with minimum dimensions 8 x 30 meters oriented with longer side parallel to the wind direction. Assigning is made by draw.**

Reason: With the present arrangement of the flying field the pilots often launch in only one corner of the launching and landing area. Such practice is dangerous and resulted in injuries. This proposal separates the pilots one from each other.

## m) 6.4.4. Definition of landing

Czech Republic

*Amend the paragraph as follows:*

A landing is considered valid if:

- the glider comes to rest and at least one part of it touches the launching and landing area;
- the competitor catches the airborne glider by hand (or if competitor is handicapped, his helper, if launching was made by this person), while standing with both feet inside the launching and landing area.

Reason: Clarification

n) 6.4.6 Organisation of rounds

Czech Republic

*Amend as follows:*

**6.4.6.3** To the semi-final rounds the best pilot from each qualifying group proceeds. Other pilots, up to the number of 24 **specified by the organiser before the beginning of the first qualifying round**, proceed to semi-final according to their normalised results. In case of tie at last proceeding places a draw decides. **The number of semi-final groups specifies the organiser before the beginning of the first qualifying round. The organiser may also decide to skip the semi-final if the total number of competitors is small. This decision must be announced before the beginning of the first qualifying round.**

**6.4.6.6** At fly-off pilots fly in one group. All pilots with non zero score ~~... either outside or inside launching and landing area.~~ **From each semi-final group the best pilot proceeds to the fly-off round. Other pilots, up to the number specified by the organiser before the beginning of the first qualifying round, proceed to fly-off** according to their normalised results. In case of tie at last proceeding places a draw decides.

Reason: Experience showed that the organiser needs to modify the flying in groups according to the number of competitors and other conditions.

o) 6.4.7.Total winner

Czech Republic

*Amend the paragraph as follows:*

~~The winner is the pilot with best result from the last round at which two pilots were flying. The third place gets the pilot who has been flying in the last but one round...>~~  
**The winner is the pilot having the best total flight time during the fly-off round**  
**The classification is in reverse order of total flight times. Pilots who didn't proceed to fly-off are ranked according their results at semi-final eventually qualifying rounds.**

**In case of a tie at top three places, the lowest single flight at fly-off decides the ranking. If a tie remains, results of semi-final round decide the ranking and if a tie still remains, he qualification results decide.**

Reason: This change is connected with the new fly-off task. It also solves the problem of a tie.

p) 6.4.8.Tasks

Czech Republic

*Amend the paragraphs as follows:*

**6.4.8.3** Task for fly-off rounds

~~All competitors of a group ... interval receives a zero score too.~~

**During the working time of 10 minutes, the competitor may launch his model glider a maximum of 5 times. The maximum accounted single flight time is 120 s. The sum of all flights is taken for the final score.**

**6.4.8.4** Preparation Time

**For each round or attempt the competitors receives 2 minutes preparation time. During this time the competitor is allowed to turn on and check his radio, but is not allowed any launch of his glider, either outside or inside the launching and landing area. If all competitors in the group are ready and agree, the working time can be started earlier.**

#### **6.4.8.5 Landing Time**

**Immediately after the end of the working time or after each attempt for the task 2 the 30 seconds landing window will begin. If a model lands later then the flight will be scored with zero points.**

Reason: The last WAG proved that a task for fly-off rounds with unpredictable time duration brings difficulties for the organiser. The new task could be as interesting as the present one and offer a fixed time duration. The added paragraphs (6.4.8.4 and

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## **Volume ABR**

### **m) B.11. Radio Control**

**Bureau**

*Amend the whole item, including re-number paragraphs, as follows:*

The organiser must:

B.11.1. Provide a smooth flight area for R/C models to facilitate take-offs and landings.

**B.11.2 There is no requirement to impound spread spectrum transmitters.**

**B.11.3 If there are competitors using am/fm transmitters on the same frequency then a transmitter pound is required only for those transmitters.**

**B.11.4 If an am/fm transmitter pound is found to be necessary then:**

- (i)** Each day, on the competition site before the start of the competition, all **am/fm** transmitters to be used in the competition that day must be impounded and kept under the supervision of a special official.
- (ii)** All transmitters must be withdrawn at the end of the day's flying activities, and may not be left in the pound, unless by special arrangement with the organiser.
- (iii)** The transmitter pound official(s) will issue the transmitter to the competitor only when he is called to make his flight (in accordance with the procedure laid down for the class concerned).
- (iv)** As soon as the flight has ended, the competitor must immediately return his transmitter to the impound official.
- (v)** A fine of 50 Euro per pilot will be imposed for failure to withdraw a transmitter, for whatever reason, during the specified period.

**B.11.5 Specific rules for am/fm transmitters:**

- (a) It is not permitted to use any am/fm transmitters on the competition site during the hours of competition unless:**
  - (i) making an official flight or**
  - (ii) the specific permission of the contest officials has been given.**
- (b) Unless the contest director allows a change in advance, using a frequency differing from that assigned by the organiser in the starting list is considered as unauthorised transmission.**
- (c) Unless otherwise stated in the rules for a particular class the competitor is allowed only one frequency for the contest.**
- (d) Note: In the case of proven interference, another single frequency may be allotted by the contest director.**

- (e) Any unauthorised transmissions during the period of the contest will result in automatic disqualification of the offender from the entire contest and render him liable to further penalties.
- (f) The transmitter frequency must be displayed on the outside of the transmitter.
- (g) Frequency synthesised transmitters must be designed to display the current frequency and to change to another frequency without RF transmission.

**B.11.7.** The organiser must provide a spectrum analyser or other adequate radio monitoring equipment for the purpose of detecting radio interference and a means of communicating this information to the pilot(s) and/or flight line director.

**B.11.8.** Unless otherwise specified, the initial starting order of the various competitors must be established by means of a random draw before the contest, ~~taking into account that~~ **and**, except **for** F3B, F3J **and** **F3K**, frequency will not follow frequency. ~~Team members will not be included in the same race in a heat of F3D or F5D nor will team member follow team member of the same team except in F3B and F3J~~ **and** members of one national team must not be in the heat immediately following. **For F3B, F3J and F3K, competitors from the same team should not, where possible, be drawn to fly in the next group.**

**B.11.9.** The organiser must survey the site of any competition event scheduled to be held in order to determine possible cases of radio interference which would affect any competitors. Any such possibilities must be reported as early as practical to participating National Airports Controls. Frequency bands or specific frequencies which have been shown to be reasonably free from interference at the site of the competition will also be reported to the National Airports Controls.

Organisers must make surveys of the competition site during both weekdays and weekends to determine if any patterns of radio interference exist and notify the National Airports Controls of any further problems—many commercial or industrial operations are weekday problems only. In any case, it is the organiser's responsibility to make certain that all competitors in a radio controlled event are notified in advance about any known radio interference problems that may exist at the flying site and at what frequency.

Reason: To update the paragraphs regarding the use of spread spectrum and am/fm transmitters. To clarify B.11.18.

n) **B.11.2** **Germany**

*Amend the paragraph as follows:*

**A Spread Spectrum technology receiver only transmitting its supply voltage and field strength back to the transmitter operated by the pilot is not considered a device for transmission of information from the model aircraft to the competitor.**

Reason: Almost every 2.4 GHz system transmits automatically status data back to the transmitter. These data are signal strength of the receiver, receiver battery voltage. The transmission of this status data cannot be switched off on almost every 2.4 GHz system. The rules of F5, F3B and F3J forbid any device of transmission in the model aircraft. As the rule was written the intention was to forbid the transmission of for example the actual height (vario), speed of the plane, in general:



flight data of all kind. To have information about the signal strength of the received signal is a safety issue and should be allowed.

The rule at the moment forbids most of the new innovative 2.4 GHz systems.

### 11.3 Volume ABR, Section 4C, Part One

#### a) **Annex 1.1 – World Championship Events for Model Aircraft** **Germany**

##### **Paragraph 3 – RC Category for Seniors**

*Add a new line at the end of paragraph 3*

##### **i) F3F Radio controlled slope soaring gliders**

Reason: The model gliding class F3F is flown since more than 30 years over the whole world. At the beginning rules differed from country to country. In 1977 the class F3F was registered as provisional class at the FAI. The Viking Races, up to now the largest and most prominent F3F competitions worldwide, organized since 1989 every two years have lead to a continuous harmonization of the rule set. The last major change of rules was carried out in consequence of the Viking Race 2004 in Germany. There in a meeting competitors of all 14 participating nations voted democratically for the first time about desirable rule changes. Since that time it is flown steadily and successfully worldwide according to these generally accepted rules.

All over the world attendance of F3F competitions has increased continuously in the course of the last five years. E.g. the number of participants in Contest-Eurotour competitions rose from 190 in 2002 to over 300 in 2009. A similar trend holds for competitions in the USA and Asia. Since 2005 pilots from North and South America and Asia participate regularly in European competitions. From 2003 on all competitions of the Contest-Eurotour were registered as FAI soaring events.

The Viking Races, acting as "unofficial world championships" up to now, due to popularity of the class turn more and more to "social events", which cannot correspond to the sportive level of top pilots anymore. Since a fairly long time the call for a conversion of the F3F class to official status and for establishing it as world championship class is getting louder. That's why the Class F3F was established as official class last year.

Therefore it is suggested now to register the class F3F as world championship class at the next possible date.