

**Annex 4H CLASS F2F – CL DIESEL PROFILE TEAM RACING**

**- ANNEX 4H -**

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**The rules for F2F are the same as F2C except for the variations shown below.**

The difference between F2C and F2F are the specifications of the aircraft/equipment used. The focus in this racing class is on flying, not on technical development/innovation. The specifications of the equipment used are set in order to make this class sustainable, affordable and offer competitors a platform to develop their flying skills.

**4.H.6. Organisation of Races**

- a) Three competing teams will fly simultaneously in each race.
  - i) The goal is to defeat the opponents and score points based upon the final position in their races. Points will be awarded to a team based upon the calculated result in their race. One point will be awarded for each lap started.
  - ii) Each team flies 3 qualifying races. Each race for a team shall be drawn in such a way that where possible different opponent teams will be selected for each of the three qualifying races. Where possible teams in a race should be from different countries.
  - iii) Each team will be given a first, second and third choice of starting place.
  - iv) The organiser can use the schedule for the draw of the qualifying races as stated in the F2C organiser's guide.
  - v) Because the objective is to win the race, F2F is not flown in rounds.
  - vi) The panel of judges will make the draw for the flight schedule.
  - vii) The 3 teams with the highest total number of points from the three qualifying flights will fly the final.
  - viii) If more than 3 teams qualify for the final due to teams having equal points from the qualifying races, a fly off between these equal teams will be organized and that winner will be promoted to that final.
- b) During a race incidents may occur causing the Panel of Judges to grant a team a re-flight. A team that is granted a re-flight by the Panel of Judges will have the option of taking this re-flight, or accepting the points awarded to them as a result of the race. They must inform the Circle Marshal of their decision within 10 minutes from the time that the Panel of Judges verdict is given to them.
- c) Scheduled races that become incomplete due to withdrawal of one or more teams from a race will be flown at the end of the qualifying flights adding teams that have been granted a re-flight. These flights, which are necessary to give all entrants full results, will be called "rest" flights.
- d) The Panel of Judges will make a new draw with these remaining teams, in accordance with 4.H.6.a) ii. Where possible teams will maintain their choice of starting place. In the case of more than one team with the same choice, the Panel of Judges will decide the starting order with a new draw between the affected teams. All rest flights will be flown with 3 teams.
- e) If fewer than 3 teams remain for the last rest flights, the race will be filled up to 3 teams by offering the teams with 3 official results a place in a this rest flight. The team qualified highest in the ranking of their lowest score in a qualifying flight will be offered the option to take part in the rest flight first, if they do not accept, the next team in the order will be offered the option etc, until the teams are reached that will accept the offer to fill out the rest flight. By accepting a vacant place in a rest flight, the teams accept that their lowest result in points from their 3 official results will be replaced by whatever result they will achieve from this rest flight.

**4.H.7. Race from Start to Finish**

- a) Each team's race begins with a 'start' signal and finishes when:
  - i) All models have completed the required laps or
  - ii) The time limits in 4.H.1.b) have been reached.
- b) The Circle Marshall will give an acoustic signal when the time limit has been reached. The time keepers will at that moment record the number of laps flown of the still flying team(s) which will

be their race result. Every lap started will count as a completed lap. The timekeepers will record the flight time or laps flown for each team.

#### **4.H.8. Definition of an Official Flight**

a) An official flight is completed when the conditions in 4.H.7 are met.

*Note: In F2F, finishing a race at less than 50 laps is allowed, because the objective of the race is not the time flown, but the position in the race.*

#### **4.H.9 Warnings Disqualifications and Penalties**

See 4.3.8

#### **4.H.10. Classification**

a) The flight time recorded by the time keepers will be corrected by adding 5 penalty seconds for each official warning a team may have received during the race.

b) If a team has not completed the race distance, the number of flown laps will be reduced by 2 laps for every warning received and the result is the scored laps.

c) The number of laps scored will be multiplied by a factor based upon the final corrected result of the team in their race, being:

i) Factor 3 for the team with the fastest corrected time, factor 2 for the team with the second fastest corrected time, and factor 1 for the team with the third fastest corrected time. Or in case of incomplete race, in order of scored laps flown.

*Note: If all 3 teams finish within 5 minutes and no penalties are issued, the winner gets  $100 \times 3 = 300$  points, the second  $2 \times 100 = 200$  points and the third  $1 \times 100 = 100$  points, plus any relevant bonuses.*

d) A team that is disqualified from a race, scores 0 points for the flight. This 0 score is ranked below the score of teams that have 0 points due to a failure to fly a lap after the starting signal.

e) Bonus points will be added to the scores of teams which include entrants less than 21 years of age. Any team that meets this requirement will receive a bonus on their corrected scores of 5%.

f) The final calculated points scored will be rounded down to the nearest whole number.

g) The race finishing order is determined by the points scored.

h) The final score is the total of all three scores of the qualifying flights of a team.

#### **4.H.11 Timekeepers**

See 4.3.12

#### **4.H.12 F2F Panel of Judges**

See 4.3.13

## Explanatory Document: Proposed F2F “Points System”

### Cross Refer to Proposals:

F2F Annex 4H 4.H.6 – 4.H.8 + 4.H.10 F2 SC 18 1 of 3  
F2F Annex 4H 4.H.6 – 4.H.8 + 4.H.10 F2 SC 18 2 of 3

### Proposed Points system in F2F, how it works.

In order to explain how the points system would work in F2F, I made some scenarios that hopefully will make it clear.

For all scenarios there are 3 teams: Team A, Team B and Team C. Team A consists of 2 seniors, Team B of 1 junior and 1 senior and Team C consists of 2 juniors.

#### Scenario 1: Normal race, all 3 teams finish within the 5 minute time limit.

Team a flies 4 minutes 8.2 sec and has one warning, team B 4 minutes 11.0 sec and have no warnings, team C 4 minutes 4.2 sec. and two warnings.

Team A, scoring time is 4 minutes 13.2 seconds. (4 min. 8.2 sec plus 5 penalty seconds for the warning).

Team B, scoring time is 4 min 11.0 seconds. No warnings so no penalty seconds.

Team C, scoring time is 4 minutes 14.2 sec. (4 min 4.2 sec plus 2 x 5 penalty seconds for the two warnings).

#### Results:

Team B is first in the result of the race and gets 100 points x 3 (placing factor) = 300 pts, and gets a bonus of 5% = 15 pts because of the junior team member. Total points = 315 points.

Team A is second in the result of the race and gets 100 points x 2 (placing factor). Total points = 200points.

Team C is third in the result of the race and gets 100 points x 1 (placing factor) = 100 points plus a bonus for 2 juniors =10%, makes 100 + 10. Total points = 110 pts.

#### Scenario 2: Very bad racing, no teams complete the race distance.

Team A runs into the lines of team B at the second stop of both of the teams and gets a DQ.

Team B was at 73 laps and one warning.

Team C breaks a prop at the first stop, replaces it and continues, but has just started lap 67 when the maximum time limit of 5 minutes for a race is reached. The team has no warnings.

#### Results:

Team B was first in the race at 73 laps and scores 73 laps = 73 points minus 2 laps for the warning making 71 points x 3 (placing factor) = 213 points plus 5 % bonus for the junior. Total points 223 points.

Team C scores 67 laps = 67 points x 2 (placing factor) making 134 points plus a 10% bonus for 2 juniors = 147 points (rounded down to full points).

Team A is DQ'd and therefore scores 0 points.

Team B has the option to take a re-flight or to take the 223 points as their result. After receiving the Panel of Judge's verdict they have 10 minutes to inform the Circle Marshal of their decision. They cannot just wait for the end of the contest to see where they are in the results. If they take the re-flight these 223 points will be replaced by the result of their re-flight. (My prediction is: most teams will take the points.)

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### Organization of re-flights / rest flights:

At the end of the contest some teams will be entitled to have a re-flight for one or more of their qualifying races. Also there will be teams whose race was put to the end of the qualifying flights due to a withdrawal of one or more of the teams before the start of one of their qualifying races.

All these teams will be put in the “rest” races to finish the qualifying races. This will lead to a number of “rest” races which will be organized as stated in the rules.

If the last “rest” race is not full, that means that there are just one or two teams left for that race, then the other teams which already have 3 qualifying results will be asked to take the vacant position in that re-flight. If they take such a vacant position, their worst result from the qualifying rounds will be replaced by the result they achieve in the re-flight.

The other teams will be approached by the Panel of Judges in the order of the team’s lowest scoring qualifying flight, to ask if they will take the vacant places. The team with the highest “low” score to be asked first, and then subsequent teams.

This system is often referred to as “the highest bidder “, meaning that the team that is prepared to give up the most points of a qualifying round for the uncertain outcome of the rest flights, has the first opportunity to accept a vacant spot in a re-flight. If there are two or more teams on equal points for their worst result of the qualifying races that are willing to take the vacant position, the judges will organize a draw to determine which team gets the vacant spot in the re-flight.

It could look like this: contest with 8 teams, result of qualifying flights.

Team	QF 1	QF 2	QF 3	Total	Lowest QF
A	200	0	300	500	0
B	315	224 **	35	574	35
C	110	306	210	62	210
D	300	300	0	600	0
E	200	Re-flight	155	355	In Re-flight
F	110	78	35	223	35
G	277	178	208	663	178
I	113	135	200	448	113

\*\* Team B was offered a re-flight, but decided to take the points instead.

A re-flight has to be organised for team E requiring two other teams to fill up the race.

The judges will approach the other teams in the following order: C, G, I, B and F, A and D.

C will probably refuse, not giving up 210 points, the same for G with 178 pts. Team I accepts, so there is just one place left. B and F both want to fly, so the judges will draw as to whom shall take the remaining spot.

After the race is finished, the above schedule will be updated with the result of that flight.

Rob Olijve  
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