

F5J FAI Rules Tutorial Outline

Last changed: Feb 2 2017 (rev12)

This outline is intended to be used as a handout and talking outline with the purpose of informing new pilots regarding F5J FAI rules. Please feel free to suggest revisions and improvements.

Thanks. --*Chris Bajorek*

1. Tutorial Overview

This presentation focuses on the FAI rules for F5J

2. Plane Limits

Can use up to 3 planes

Max wingspan - 4m, Max mass - 5kg (176.4 oz/11 pounds), Max surface area - 150dm²

No telemetry allowed except batt. voltage, RX status (i.e. no altitude)

Must have Altitude Motor Run Timer (AMRT)

No skegs allowed

3. AMRT (limiter) details

Records and displays max height between motor start and 10 sec after cutoff

Restricts motor run to 30 sec max

Emergency motor restarts allowed in *F5J USA Tour* events (FAI rules deviation)

4. Flying Site

No obstructions within 100mtr of launch/land spots

Lane spacing 10mtr min.

Access Corridor 6mtr wide and ≥ 15 mtr from launch/land spots

Main thoroughfare for persons walking to a launch/land lane

5. Safety

CD defines Safety Area

Access Corridor + other restricted flying areas

Infringement of Safety Area - 300 pt penalty

Plane hitting person in Access Corridor - 1000 pt penalty

FAI recommendation: Always enter thermal in same direction as existing planes

6. Flights

Min. of 4 qualifying rounds

Reflights allowed when

Plane collides with another

Flight is hindered or aborted due to unexpected event

If you continue to fly you waive your reflight right

Reflights assigned in partial group or a new reflight group (min. 6 pilots)

Random draw used to fill new reflight group

7. Zero flights

Zero flight score if

Plane loses a part during launch or flight

Launch is >4mtr away from land spot

Nose of plane lands more than 75mtr from land spot

AMRT fails to display Start Height

Overfly end signal by 1min or more

Motor is restarted after launch (*F5J USA Tour* FAI rules deviation)

8. Penalties

Infringement of Safety Area - 300 pts

Plane hits person in Access Corridor - 1000pts

Launch direction violation: 100 pts

Motor starts before start signal: 100 pts

Land direction violation: 100 pts

9. Groups and Working Times

Min. 6 pilots/group

Except in flyoffs...

...group draws minimize flying against the same pilot many times

GliderScore scoring program ensures this

Each round starts with 5min Prep Time

Qualifying rounds are 10min Working Time

Fly-off rounds are 15min Working Time

10. Launching

Launch direction set by CD

100pnt penalty for violating

Motor must not start until start signal

100pnt penalty for violating

Must launch within 4mtr of land spot

Zero flight score for violating

11. Landing

Landing direction set by CD

100pnt penalty for violating

Okay to safely retrieve plane before end of Working Time

12. Scoring: Duration score

Time starts at release of plane

Time stops at contact with ground or obj. touching ground or end signal

Duration score: 1 pnt/sec, rounded down to nearest sec.

Overflying end signal = zero landing points

Overflying end signal by 1min or more = zero flight

13. Handling Late Launches

Example: initial motor spinup failure, then launch late

- (a) Can land within Working Time limit, get landing points but lose duration points due to shorter window from late launch
- (b) Or can overfly Working Time by up to 59 seconds, lose landing points. No duration points past the end signal.

14. Scoring: Start Height Penalty

Start Height = highest point between motor on and 10 sec after motor off

Start Height rounded down to nearest mtr

Start Height Penalty = $0.5 \text{ pnt/mtr up to } 200\text{mtr} + 3 \text{ pnt/mtr above } 200$

15. Scoring: Land Bonus

Landing Bonus 50pnt max for 10mtr tape (5pnt/mtr)

Landing distance measured from tip of plane's nose

Zero landing bonus if overfly the Working Time end signal

16. Scoring: Total Round Score

Total = duration + land bonus - start height penalty

Normalization

Highest total score in each group is normalized to 1000 for top pilot

Total is Normalized (differs from ALES where landings are added to normalized scores)

17. Final Classification

Throw-out round

If more than 4 qualifying rounds flown FAI rules dictate 1 throw-out

Fly-off rounds

The CD may elect to not have fly-offs if announced before the contest starts.

Top 30% (rounded down) of pilots participate

3 or 4 fly-off rounds, 2 if bad weather or poor visibility

Qualifying round scores do not carry over into fly-offs

18. Any Questions?