



Split second launch

Penalty and Bonus start

Multiple Task Contest

Start and Landing A

Find out what F5K is a

## F5K development 2019 - 2021



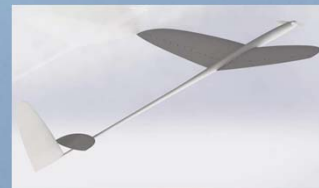
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Brian van der Gouw, version 1-11-2020



## Overview

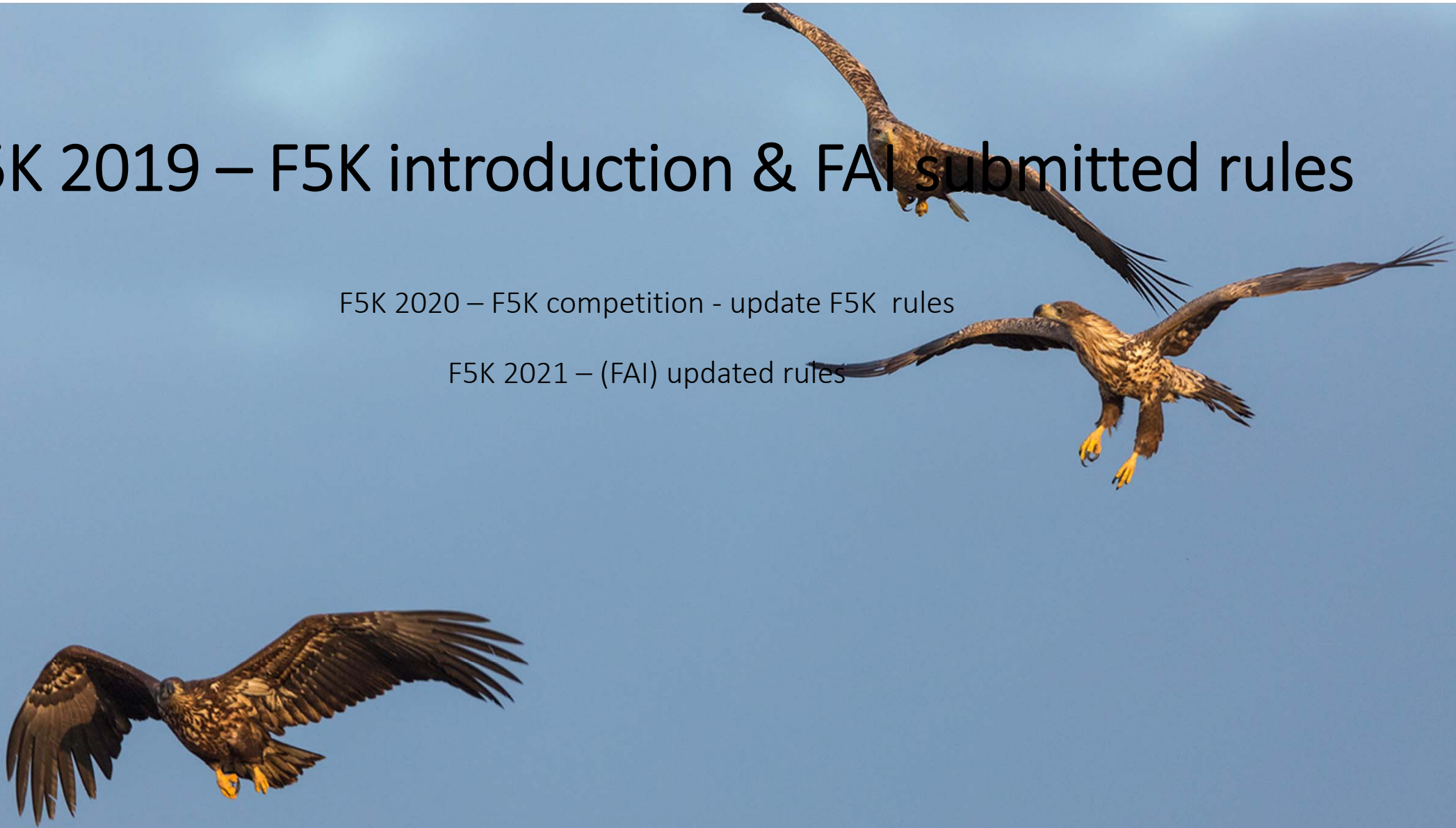
- F5K 2019 – F5K introduction & FAI submitted rules
- F5K 2020 – F5K competition and improvements, update F5K rules
- F5K 2021 – F5K rules update



# F5K 2019 – F5K introduction & FAI submitted rules

F5K 2020 – F5K competition - update F5K rules

F5K 2021 – (FAI) updated rules





## Origin and objectives F5K

- F5K is a new class, but be aware it is not F3K with a motor!
- Accessible to all pilots, regardless of age, health, budget
- Main F5K contest format objectives:
  - Multiple Task Contest
  - Tactical launch altitude
  - Safe "QT" vs landing timing

Above all: Thermal Soaring first!



## Multiple Task Contest

➤ Inspired by F3K competition format, but with less tasks and small adjustments

- Survey: most popular F3K Tasks

- All up (F5K: 3x 4 minutes)
- 1,2,3,4 minutes
- Poker (F5K: max 3 starts & launch penalty)
- 5 out 7 minutes (F5K: max 3 starts & launch penalty)
- New task added: 3,3,4 minutes (F5K: max 3 starts)

- More deviation in scores

WC 2019: Top 18 within 5 points!

	Name	1 L1x5	2 BLddr	3 L2x4	4 5x2.0	5 3200	6 AllUp	Penalty & Rnd	Score	%
1	Adas Siumbrys	-1000	1000	1000	1000	1000	1000		5 000	100.0%
2	Nikola Francic	1000	1000	1000	-998	1000	1000		5 000	100.0%
3	Cederic Duss	1000	-995	1000	1000	1000	1000		5 000	100.0%
4	Roy Dor	1000	-988	1000	1000	1000	1000		5 000	100.0%
5	Pierre Meunier	1000	-997	1000	998	1000	1000		4 998	99.96 %
6	Joseph Wurts	1000	-914	1000	1000	998	1000		4 998	99.96 %
7	Roland Sommer	1000	-906	1000	998	1000	1000		4 998	99.96 %
8	Dmitriy Lomovtsev	1000	-715	1000	998	1000	1000		4 998	99.96 %
9	Peter Williams	1000	1000	-500	998	1000	1000		4 998	99.96 %
10	Anjan Hucaljuk	1000	-961	1000	1000	997	1000		4 997	99.94 %
11	Pavel Kristof	1000	-894	1000	997	1000	1000		4 997	99.94 %
12	Hermann Haas	1000	-547	1000	997	1000	1000		4 997	99.94 %
13	Alan Smith	1000	998	1000	998	-997	1000		4 996	99.92 %
14	Kevin Botherway	1000	-741	1000	998	998	1000		4 996	99.92 %
15	Ricardas Siumbrys	1000	1000	1000	995	1000	-796		4 995	99.90 %
16	Nathan Bartley	1000	-747	1000	998	997	1000		4 995	99.90 %
17	Ondrej Rezier	1000	-737	1000	998	997	1000		4 995	99.90 %
18	Thomas Truffo	1000	-683	1000	997	998	1000		4 995	99.90 %

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Brian van der Gouw heeft een poll gemaakt.  
28 juni 2019

With the World Championship coming up I am wondering: what is your favorite F3K task?

- ☒ Task C (All up, last down)  
Door jou toegevoegd +56
- ☐ Task H (One, two, three and four minute target flight times, any order)  
Door jou toegevoegd +21
- ☐ Task E (Poker - variable target time)  
Door jou toegevoegd +12
- ☒ Task A (Last flight), 5 out 7  
Door jou toegevoegd +7
- ☐ Task G (Five longest flights) - 5x2  
Door jou toegevoegd +4

Nog 7 opties...

👍👎 9 8 opmerkingen 1 keer gedeeld





Example F3K results – Top 4 pilots all have 7000 points

Uhrzeit : 18:09:47

Samstag, 1. August 2020

## F 3 K - Hand-Launch-Glider 2020

Platz	Name	Vorname	Verein	J	Durchgang								Straf-P.	Ergebnis	%
					1	2	3	4	5	6	7	8			
1	Höllein	Ryan	AC Coburg	<input type="checkbox"/>	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	7000,0	100,00
2	Sommer	Roland	FSV Dreieich	<input type="checkbox"/>	1000,0	1000,0	996,6	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	7000,0	100,00
3	Gramß	Robert	DAEC Einzel	<input type="checkbox"/>	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	993,0	1000,0	1000,0	7000,0	100,00
4	Bednarz	Walther	RCM Neuburg	<input type="checkbox"/>	1000,0	1000,0	1000,0	1000,0	1000,0	1000,0	990,0	1000,0	1000,0	7000,0	98,57
5	Schlömmner	Klaus	MFG Pongau	<input type="checkbox"/>	1000,0	1000,0	1000,0	1000,0	997,9	1000,0	998,0	906,0	6995,9	99,94	
6	Börder	Roland	MSFC Neumarkt	<input type="checkbox"/>	1000,0	1000,0	996,6	1000,0	1000,0	1000,0	993,0	910,0	6989,6	99,85	
7	Schrader	Holger	LSV Githorn	<input type="checkbox"/>	1000,0	1000,0	991,6	1000,0	995,0	1000,0	971,0	946,0	6957,6	99,39	
8	Lämmermann	Tobias	MFC Freystadt Sonder	<input type="checkbox"/>	1000,0	1000,0	1000,0	753,1	1000,0	1000,0	1000,0	1000,0	6900,0	100,00	
9	Ruonala	Mika	Frankfurt	<input type="checkbox"/>	1000,0	1000,0	969,7	1000,0	842,8	1000,0	1000,0	736,0	6812,6	97,32	
10	Glaser	Tom	MSV Inning	<input type="checkbox"/>	1000,0	1000,0	687,4	1000,0	1000,0	892,0	889,0	1000,0	6781,0	96,87	
11	Schwind	Sven	Kermess I	<input type="checkbox"/>	990,0	1000,0	926,2	771,4	976,6	1000,0	879,0	571,0	6543,2	93,47	
12	Gschwandtner	Maximilian		<input type="checkbox"/>	1000,0	1000,0	986,6	740,7	-0,0	753,0	960,0	877,0	6317,3	90,25	
13	Baumann	Jörg	AC Teuschnitz	<input type="checkbox"/>	996,7	1000,0	664,1	771,4	870,5	747,0	956,0	746,0	6089,6	86,96	
14	Münch	Marius	MFG Dettingen u. Teck	<input checked="" type="checkbox"/>	1000,0	1000,0	675,9	571,4	919,7	863,0	872,0	662,0	5992,7	85,61	
15	Weihe	Caroline	MSC Buxheim	<input checked="" type="checkbox"/>	1000,0	722,9	691,3	1000,0	1000,0	828,0	738,0	439,0	5980,2	85,40	
16	Heinle	Philipp	Kermess	<input type="checkbox"/>	1000,0	789,6	815,1	1000,0	601,0	956,0	202,0	-0,0	5363,7	76,60	
17	Stadler	Herbert	Langwieder Haideflie	<input type="checkbox"/>	670,0	908,3	907,6	740,7	426,7	761,0	647,0	493,0	5127,6	73,21	
18	Raiber	Peter	Langwieder Haideflie	<input type="checkbox"/>	283,3	618,8	734,5	771,4	764,3	741,0	871,0	456,0	4957,0	70,81	
19	Ulrich	Christian	Langwieder Haideflie	<input type="checkbox"/>	576,7	716,7	616,3	740,7	442,4	797,0	949,0	546,0	4942,4	70,61	
20	Bednarz	Leo	RCM Neuburg	<input checked="" type="checkbox"/>	616,7	533,3	692,4	740,7	687,9	663,0	905,0	550,0	4855,7	69,30	
21	Raiber	Paul	Langwieder Haideflie	<input checked="" type="checkbox"/>	360,0	762,5	491,6	571,4	551,8	693,0	753,0	492,0	4315,4	61,65	
22	Wondra	Robert	MFG Mallershofener	<input type="checkbox"/>	706,7	729,2	514,9	571,4	425,7	520,0	497,0	402,0	3964,9	56,64	

Ab fünf (5) Durchgänge ist der schlechteste Flug ein Streicher !







## Safety first

- Start and Landing Area (Pilots and helper on prescribed position)
- Timing and landing within a Pilot area

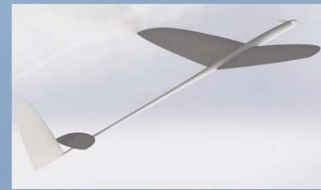
Compact start material



Prescribed area – Pilot area



Safe distance – 15 mtr





# Plane restrictions

Based on:

- Affordable (current F3K range)
- Home build possible
- Powertrain for short starts (7-9 sec)
- Sustainable



## F5K – Plane restrictions

### Plane restrictions:

- Definition of the model glider
- Maximum wingspan 1500 mm
- Minimum loading 12 g/dm<sup>2</sup>

FAI section B – General specifications for CAIM classes

### Surface area:

The surface area includes the total surface of the wings and that of the horizontal or oblique stabilising surface or surfaces. The surfaces taken for calculation are the orthogonal projection on to a horizontal plane of the surfaces in question with each surface at zero incidences.

When wings or stabilising surfaces are built into the fuselage of the model aircraft the surface taken into account shall include that area contained within the normal contours of the flight surfaces extended so as to meet at the plane of symmetry of the model.

### Loading :

When loading rules are applied the loading shall be defined as the weight in grams per square decimetre of surface area.

- Maximum flying weight 600 gram
- LIPO batteries with nominal cell voltage of 3.7 V only
- Maximum voltage at full charge  $3 \times 4.2 = 12.6$  V (3s)
- Radius of the nose must be a minimum of 5 mm in all orientations.
- Any number of control functions is permitted.
- All ballast must be carried internally and fastened securely within the airframe.
- Each model must be fitted with an approved AMRT in accordance with the Technical Specification published in F5K Altimeter/Motor Run Timer Technical Documentation.
- Installation of the AMRT in a competitor's model shall be in accordance with the requirements as detailed in the Technical Guidance Documentation.
- 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.
- Each competitor is allowed to use three model gliders during a round. It is permissible to change parts between these three model gliders. The competitor may change his model gliders at any time as long as they conform to the specifications. The organizer has to mark the model gliders and all interchangeable parts of each of the three model gliders before the start of the competition. All spare model gliders must stay outside the flying field and only one model is permissible on the flying field to score a valid flight time. The previous model must be removed from the flying field before a replacement model may be launched.
- Only in order to ensure safe flying, receiver voltage and/or flight battery voltage and/or remote control link quality measurements may be used to assess the condition of the model glider.
- Use during the flight of any other measurements on the model glider is not allowed.
- The use of any automatic flight control or stabilisation is not allowed.
- Any construction materials are permitted

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The background of the slide features three eagles in flight against a clear blue sky. One eagle is in the upper right, another is in the middle right, and a third is in the lower left. They are all shown in various stages of wing movement, with their wings spread wide, highlighting the texture of their feathers and the sharp points of their wings.

F5K 2019 – F5K introduction & FAI submitted rules

# F5K 2020 – F5K competition - update F5K rules

F5K 2021 – FAI updated rules



## F5K 2020 – improvements

### ➤ Gliderscore:

- FAI F5K rules implemented in Gliderscore
- Realtime smartphone score entry available
- Easy access for Nominal Launch Height in place (NLH)
- Display and simultaneously Pandora functionality
- Contest setup time within 10 minutes

### ➤ Tasks:

- Improved tasks description (unambiguously)
- Upgrade for task B Last flight and Poker (help and reviewed by Joe Wurts)
- Simplified landing and launch time
- Simplified AMRT settings
- New and proven launch bonus and penalty table
- Less penalties

### ➤ Contest:

- **Local** rule for e-dlg planes with lower wingload (app. 11 gr/dm<sup>2</sup>)
- Workinstruction for Pilot Area
- New FAI F5K rules proposal 2021









## Several F5K contest 2020

- Pilots from The Netherlands, UK, Germany
- Senior and junior pilots
- Commercial and home build planes





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Home QuickStart

### Introduction


GliderScore is easy to use and has all the features needed from pilot entry to final results.

- Start with a PC and the GliderScore program.
- Leave the more advanced features alone until you are ready to try them.

To get started, click on the [QuickStart](#) tab above.  
If you would like to give it a try, get the program [here](#).

GliderScore simply takes the hard work out of running RC glider competitions.

- creates an excellent draw
- produces draw reports, scoring sheets and score cards
- allows easy entry of flight data and instantly calculate scores



I want to thank Gerry Carter from Gliderscore for all the help he has provided in further improving the F5K rules. Thanks to the intensive collaboration, we have been able to create the new F5K format in Gliderscore.

# F5K 2020 – Gliderscore scorecards and e-score examples

**D - 3 Flights**  
3:00, 3:00, 4:00 flights (any order)  
Max 3 flights in 10 minutes

Brian VAN DER GOUW  
Freq=2.4 Ctry:NED

Rnd 1 Grp 1  
Lane 3

#	Time	Height	Out of Pilot Area	General Penalty	Safety Penalty
1			<input type="checkbox"/>		
2			<input type="checkbox"/>		
3			<input type="checkbox"/>		

Pilot: \_\_\_\_\_ Timer: \_\_\_\_\_

**E - Poker**  
Up to 3 flights to time count  
Pilot chooses target times  
Max 3 flights in 10 mins

Brian VAN DER GOUW  
Freq=2.4 Ctry:NED

Rnd 3 Grp 3  
Lane 1

Number of launches:

#	Time	Height	Out of Pilot Area	General Penalty	Safety Penalty	OK?
1			<input type="checkbox"/>			Y/N
2			<input type="checkbox"/>			Y/N
3			<input type="checkbox"/>			Y/N

Submit successful flights against their correct flight number.

Pilot: \_\_\_\_\_ Timer: \_\_\_\_\_

**B - Last flight**  
Last flight counts  
5 minute max  
Max 3 flights in 7 mins

Brian VAN DER GOUW  
Freq=2.4 Ctry:NED

Rnd 5 Grp 1  
Lane 3

Number of launches:

Time	Height	Out of Pilot Area	General Penalty	Safety Penalty
		<input type="checkbox"/>		

Submit details for last flight and totals of penalties (if any)

Pilot: \_\_\_\_\_ Timer: \_\_\_\_\_

**C - All up**  
4 minute max  
3 flights per round

Brian VAN DER GOUW  
Freq=2.4 Ctry:NED

Rnd 2 Grp 3  
Lane 2

#	Time	Height	Out of Pilot Area	General Penalty	Safety Penalty
1			<input type="checkbox"/>		
2			<input type="checkbox"/>		
3			<input type="checkbox"/>		

Pilot: \_\_\_\_\_ Timer: \_\_\_\_\_

**A - 4 Flights**  
1:00, 2:00, 3:00 and 4:00 mins  
4 flights in 10 minutes (any order)

Brian VAN DER GOUW  
Freq=2.4 Ctry:NED

Rnd 4 Grp 2  
Lane 3

#	Time	Height	Out of Pilot Area	General Penalty	Safety Penalty
1			<input type="checkbox"/>		
2			<input type="checkbox"/>		
3			<input type="checkbox"/>		
4			<input type="checkbox"/>		

Pilot: \_\_\_\_\_ Timer: \_\_\_\_\_

**C - All up**  
4 minute max  
3 flights per round

Brian VAN DER GOUW  
Freq=2.4 Ctry:NED

Rnd 6 Grp 3  
Lane 2

#	Time	Height	Out of Pilot Area	General Penalty	Safety Penalty
1			<input type="checkbox"/>		
2			<input type="checkbox"/>		
3			<input type="checkbox"/>		

Pilot: \_\_\_\_\_ Timer: \_\_\_\_\_

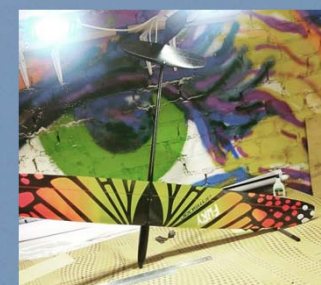
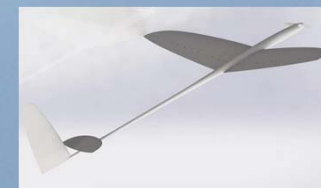
Round 5 Group 2  
Lane 4  
Task B - Last flight counts; 5 min max;  
Max 3 flights in 7 mins  
Reference height 60 metres

Nbr Of Launches   
Time  :   
Height   
Land Out ☒ (-10 points)  
General Penalty   
Safety Penalty

Submit  
< Back Back to list Next >

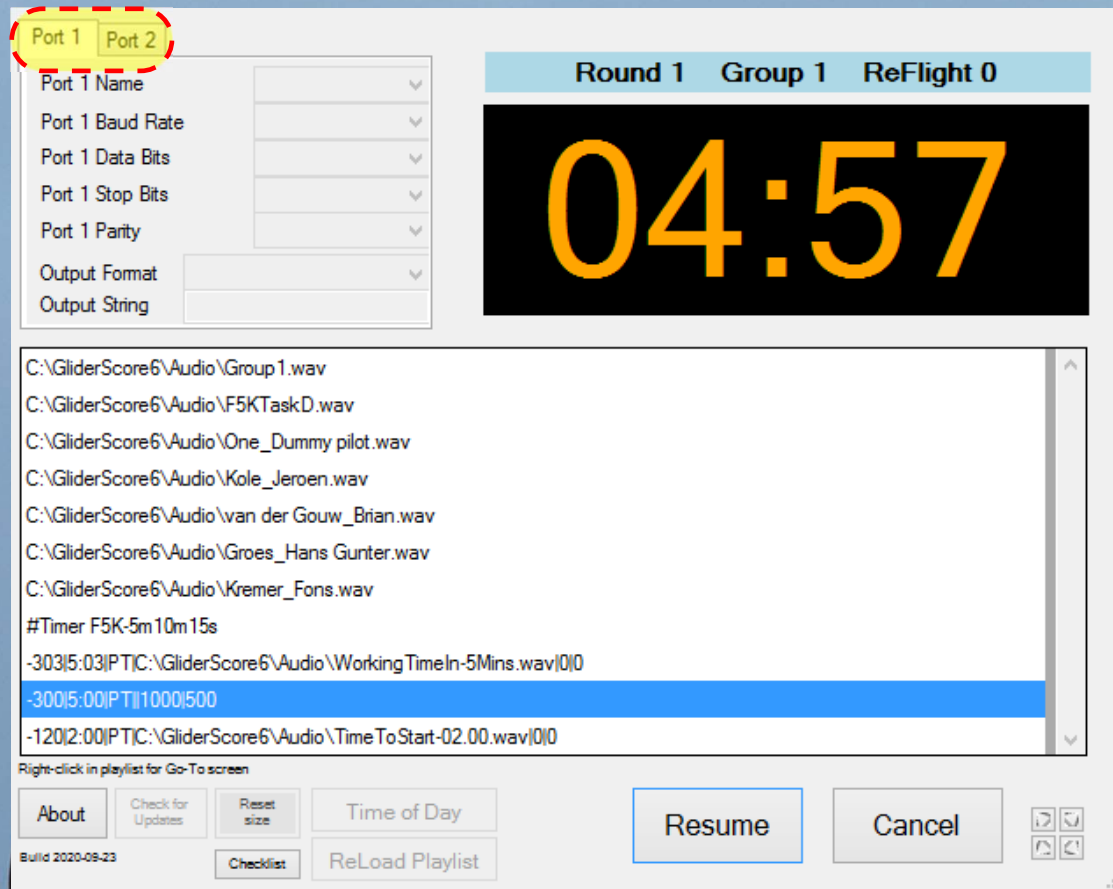
Round 5 Group 2 ReFlight 0

Round 1 Group 2 ReFlight 0									
Name	Ctry	#	Time	Height Metres	Height Landed Points	General Out	FLIGHT Penalty	POINTS	TOTAL POINTS
Dievelaar, Herman	NED	1	4:00	67	-7.0	0	0	233.0	493.5
		2	1:50	55	2.5	0	0	112.5	
		3	2:21	46	7.0	0	0	148.0	
Zweers, Peter	NED	1	4:01	47	6.5	0	0	246.5	478.5
		2	1:25	49	5.5	0	0	90.5	
		3	2:19	55	2.5	0	0	141.5	
de Jong, Rasmus	NED	1	2:14	55	2.5	0	0	136.5	401.5
		2	1:34	67	-7.0	0	0	87.0	
		3	3:13	71	-15.0	0	0	178.0	
van der Zwaan, Norbert	NED	1	3:09	66	-6.0	-10	0	173.0	331.0
		2	1:20	68	-8.0	0	0	72.0	
		3	1:26	60	0.0	0	0	86.0	
		1	3:00	60	0.0	-10	0	170.0	





## Display and simultaneously Pandora functionality



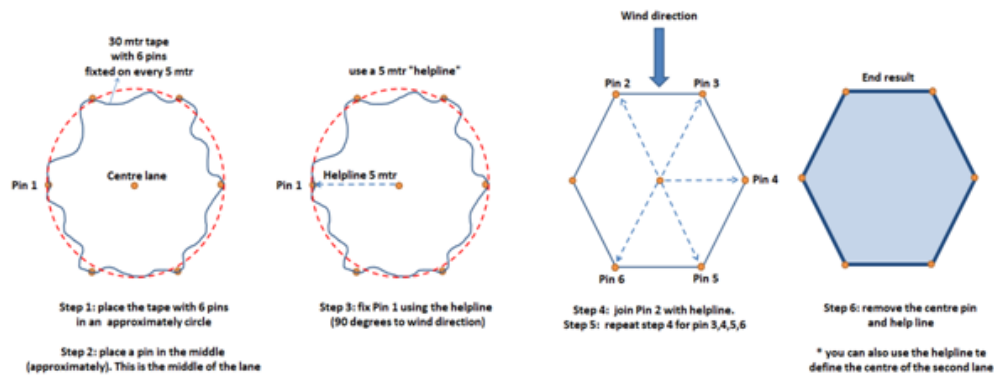
Pandora



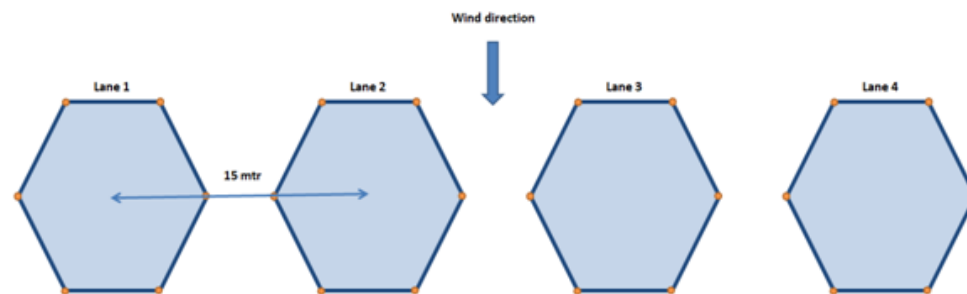
Display

## Workinstruction for making the Pilot Area

### Launch and Landing area (Pilots Area):



- The Launch- and Landing area is defined using a 30 meter tape pinned around the center making a hexagon with an outer enclosing circle with a diameter of 10 meters, called the individual "Pilot Area"



- The distance between two Pilot Areas is 15 meter from center to center perpendicular to the wind direction
- The boundary of the rectangular flying field will nowhere be closer than 15 meters from the center of any Pilot Area.





# F5K 2020 – Contest reports and Altis AMRT log

## F5K Losser Open 2020 - Overall Results

[Losser 26-9-2020]

www.GliderScore.com

Rank	Name	Score	Pcnt	Raw Score	Rnd1 3, 3, 4	Rnd2 AllUp 4:00*3	Rnd3 Poker 3 in 10m	Rnd4 1, 2, 3, 4	Rnd5 L1 5max in 7m	Rnd6 AllUp 4:00*3
1	FREITAG, Ulrich	5719	100,00	5719	840	1000	987	1000	892	1000
	Time	8:19		8:37	7:21	9:45	4:55	11:21		
	Flights#	4:00	3:00	3:30	2:14	2:00	2:21	3:00	3:57	4:00
	Heights	1:19		2:53	0:00	1:51	0:57	4:55	2	3:21
	LnagOut	67 61 71		62 61 66	68 75 0	62 59 61 57	78	67 72 61		
	LnagOut	n n y		n n n	n y n	n n n n	n	n n n		
2	BEERENDONK, Jorn	5672	99,18	5672	1000	836	1000	927	983	926
	Time	9:13		8:05	7:00	8:54	3:14	7:25		
	Flights#	4:02	2:53	1:01	3:04	2:00	2:30	1:00	1:53	2:12
	Heights	2:17		4:30	0:00	2:02	3:59	3:53		1:53
	LnagOut	62 53 54		46 58 55	68 58 70	40 50 70 51	54	51 50 72		
	LnagOut	n n n		n n n	n n n	n n n n	n	n n n		
3	GROES, Hans Gunter	5664	99,04	5664	1000	843	821	1000	1000	1000
	Time	9:32		7:26	9:09	9:27	3:29	8:39		
	Flights#	4:00	2:32	3:39	1:51	2:00	3:00	4:00	3:00	2:49
	Heights	3:00		1:56	4:09	1:58	0:29	3:29	3	2:22
	LnagOut	72 66 59		66 65 67	74 69 71	75 74 59 27	69	70 72 73		
	LnagOut	n n n		n n n	n n n	n n n n	n	n n n		
4	VAN DER GOUW, Brian	5616	98,20	5616	991	859	1000	766	1000	1000
	Time	8:58		7:50	9:47	8:44	4:54	9:34		
	Flights#	4:03	1:55	3:11	2:32	2:00	2:47	2:03	2:37	2:44
	Heights	2:21		1:23	0:00	1:56	2:18	2:55		3:55
	LnagOut	57 47 59		66 59 72	57 65 0	67 66 57 66	71	72 74 77		
	LnagOut	n n n		n y n	n n n	n n n n	n	y n n		
5	DIEVELAAR, Herman	5336	93,30	5336	1000	742	1000	999	750	845
	Time	8:11		7:14	2:00	9:26	3:15	8:18		
	Flights#	4:00	1:50	1:41	4:00	4:08	1:01	2:33	3:59	2:56
	Heights	2:21		1:23	0:00	1:57	2:30	3:15	3	2:05
	LnagOut	67 55 46		48 62 56	68 0 0	72 43 66 70	76	75 76 72		
	LnagOut	n n n		n n n	n n n	n n n n	y	y n n		
6	ZWEERS, Peter	4745	82,97	4745	970	706	535	778	1000	756
	Time	7:45		6:26	3:45	7:07	2:48	6:26		
	Flights#	4:01	1:25	2:58	1:55	1:45	2:00	1:50	1:16	2:56
	Heights	2:19		1:33	0:00	4:01	0:00	4:55	2	2:05
	LnagOut	47 49 55		59 64 64	60 53 0	57 66 66 0	55	60 53 60		
	LnagOut	n n n		y y n	n n n	n n n n	n	y y n		
7	KOLE, Jeroen	4727	82,65	4727	956	1000	647	1000	971	153
	Time	8:40		9:40	1:45	9:21	4:55	1:55		
	Flights#	4:01	2:22	1:42	3:59	1:45	0:00	1:00	2:00	1:55
	Heights	2:17		3:59	0:00	2:33	3:48	4:55	2	0:00
	LnagOut	52 51 63		52 52 53	69 0 0	72 60 60 69	64	71 0 0		
	LnagOut	n n n		n n n	n n n	n n n n	y	n n n		
8	NIEUWENHUIJSEN, Hen	4267	74,61	4267	874	629	260	971	839	694
	Time	7:56		4:58	3:08	9:16	3:59	9:41		
	Flights#	3:01	1:35	2:17	1:45	3:08	0:00	4:16	2:02	1:50
	Heights	3:20		0:55	0:00	1:07	1:51	2:12		1:39
	LnagOut	61 48 51		58 49 46	69 0 0	61 59 60 56	65	59 51 61		
	LnagOut	n n n		n n y	n n n	y n y n	n	n y y		
9	DE JONG, Rasmus	4056	70,92	4056	814	627	755	855	405	600
	Time	7:01		5:16	2:00	9:16	1:20	4:48		
	Flights#	2:14	1:34	1:40	1:35	2:00	0:00	2:04	1:55	1:32
	Heights	3:13		2:01	0:00	1:20	3:57	1:20	3	1:22
	LnagOut	55 67 71		50 59 61	63 0 0	67 68 53 71	58	59 56 59		
	LnagOut	n n n		n y y	y n n	n y n n	n	n y n		

## F5K Losser Open 2020 - Land Out of Pilot Area (Penalty)

[Losser 26-9-2020]

www.GliderScore.com

[Pilots with zero total normalised scores are excluded from this report]

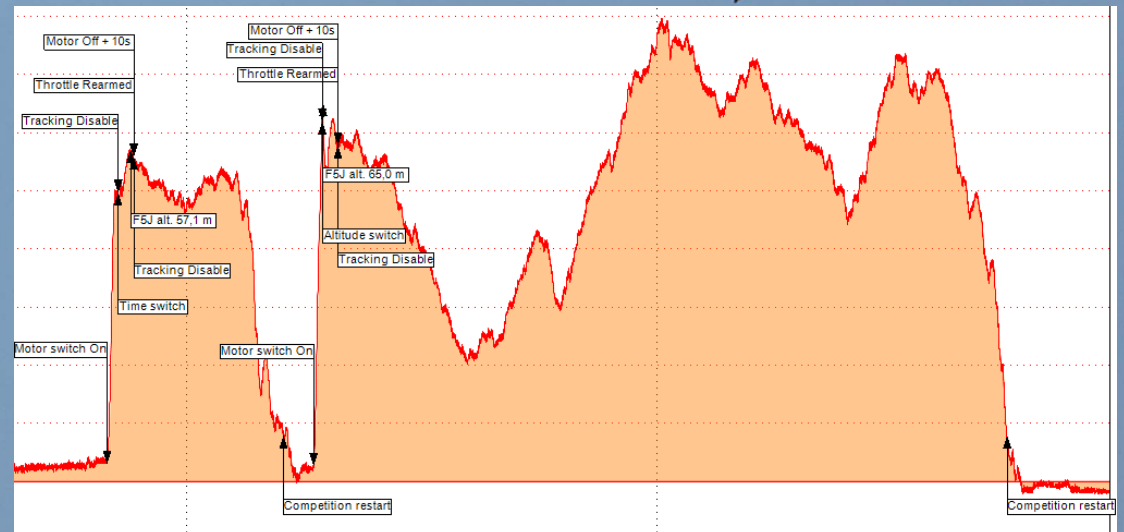
Rank	Name	Total Pity	Pcnt	Rnd1 Pity	Rnd2 Pity	Rnd3 Pity	Rnd4 Pity	Rnd5 Pity	Rnd6 Pity
1	Groes, Hans Gunter	0	0,00	0	0	0	0	0	0
10	Neerings, Mike	-50	0,00	-10	-20	0	0	-10	-10
11	de Jong, Rasmus	-50	0,00	0	-20	-10	-10	0	-10
12	Mouratidis, Panagiotis	-60	0,00	-20	-10	0	-20	0	-10
2	Beerendonk, Jom	0	0,00	0	0	0	0	0	0
3	Kole, Jeroen	-10	0,00	0	0	0	0	-10	0
4	van der Gouw, Brian	-20	0,00	0	-10	0	0	0	-10
5	van der Zwaan, Norbert	-20	0,00	-10	0	0	-10	0	0
6	Dievelaar, Herman	-20	0,00	0	0	0	0	-10	-10
7	Freitag, Ulrich	-20	0,00	-10	0	-10	0	0	0
8	Zweers, Peter	-40	0,00	0	-20	0	0	0	-20
9	Nieuwenhuijsen, Henk	-50	0,00	0	-10	0	-20	0	-20

## F5K Losser Open 2020 - Position Report

[Losser 26-9-2020]

www.GliderScore.com

Rank	Name	Rnd1 3, 3, 4	Rnd2 AllUp 4:00*3	Rnd3 Poker 3 in 10m	Rnd4 1, 2, 3, 4	Rnd5 L1 5max in 7m	Rnd6 AllUp 4:00*3
	FREITAG, Ulrich	8	4	3	1	2	1
	BEERENDONK, Jorn	=1	5	2	2	1	2
	GROES, Hans Gunter	=1	3	5	4	3	3
	VAN DER GOUW, Brian	4	2	1	5	4	4
	DIEVELAAR, Herman	=1	6	4	3	6	5
	ZWEERS, Peter	5	7	7	8	7	6
	KOLE, Jeroen	6	1	6	6	5	7
	NIEUWENHUIJSEN, Hen	7	9	11	10	8	8
	DE JONG, Rasmus	9	10	8	7	9	9
	NEERINGS, Mike	12	12	9	9	11	10
	VAN DER ZWAAN, Norb	11	8	10	11	10	11
	MOURATIDIS, Panagiotis	10	11	12	12	12	12
	PILOT ONE, Dummy	=13	=13	=13	=13	=13	=13
	KREMER, Fons	=13	=13	=13	=13	=13	=13
	PILOT TWO, Dummy	=13	=13	=13	=13	=13	=13



## F5K 2020 – Easy control the Nominal Launch Height settings

<b>COMPETITION</b>		F5K Losser Open 2020	Venue	Losser	Date	26-9-2020
<b>Competition Class</b>		<input type="button" value="Select"/> F5K Electric Launch Glider - various tasks				
<b>PILOT Options and Entry</b>		<input type="checkbox"/> Use Teams? Nbr for Team Score? <input type="text" value="3"/> <input type="button" value="i"/> <input type="checkbox"/> Use Pilot Start Numbers? <input type="checkbox"/> Use Classes? <input type="checkbox"/> Use Roles? <input type="checkbox"/> Use Models? <input type="button" value="i"/> <div style="text-align: right;">15 Pilots   0 Teams   0 Retired</div> <div> <input type="button" value="Pilot Entry"/> <input type="button" value="i"/>  <input type="button" value="Pilot Import"/> <input type="button" value="i"/> </div>				
<b>DRAW Options</b>		<input type="button" value="i"/> Team Protection? <input type="checkbox"/> 20kHz Spacing? <input type="checkbox"/> Assign Helpers? <input type="checkbox"/> Lanes <input type="button" value="Random"/> 5 lanes				
<b>SCORING Options</b>		<input type="button" value="i"/> GroupScore <input type="button" value="Points"/> TotalScore <input type="button" value="Rounded"/> to <input type="text" value="0"/> Decs <input type="button" value="Drop worst Task scores"/> <input type="button" value="i"/> 1 at Rnd <input type="text" value="10"/> 2 at Rnd <input type="text" value="99"/>				
<b>SCORING Rules</b>		<div> <input type="button" value="i"/> Timing decimals <input type="text" value="0"/> decs <input type="button" value="ViewBonus"/>            Height bonus/penalty table            Nominal Launch Height <input type="text" value="60"/> Metres            Select tasks <input type="button" value="Edit F5K Tasks"/> <input type="button" value="i"/> </div> <div style="border: 2px dashed red; padding: 5px; margin-top: 5px;"> <b>F5K</b>  <input type="button" value="0"/> decs <input type="button" value="ViewBonus"/>  <input type="button" value="F5K Open Losser"/>  <input type="text" value="60"/> Metres  <input type="button" value="Edit F5K Tasks"/> <input type="button" value="i"/> </div>				
<b>DRAW</b>		<div> <input type="button" value="i"/> Draw Mode <input type="button" value="ManOnMan"/> <input type="button" value="i"/>  <input type="button" value="i"/> Groups/Round <input type="text" value="3"/>  <input type="button" value="i"/> Pilots/Group (Min/Max) <input type="text" value="5"/> <input type="text" value="5"/> <input type="button" value="Re-Draw"/>  <input type="button" value="i"/> Allow Back-to-Back flights <input type="button" value="Yes"/> <input type="button" value="Check"/>  <input type="button" value="i"/> Rounds Drawn / Draw Locked <input type="text" value="8"/> <input type="button" value="No"/> </div>				
		<div> <input type="button" value="Score Entry"/>  <input type="button" value="eScoring"/>  <input type="button" value="Reports"/>  <input type="button" value="Audio &amp; Timer"/>  <input type="button" value="Score Check"/>  <input type="button" value="Email Reports"/>  <input type="button" value="Lock Competition"/>  <input type="button" value="Close"/> </div>				



# F5K 2020 – example Nominal Launch Height Bonus and Penalty table

## NLH60

F5K Height Bonus/Height Penalty List for 'FAI 2021'

Launch Height	Nominal Launch Height	Height Difference	Points per Metre	Bonus/(Penalty)
85	60	25	3.0	-55.0
84	60	24	3.0	-52.0
83	60	23	3.0	-49.0
82	60	22	3.0	-46.0
81	60	21	3.0	-43.0
80	60	20	3.0	-40.0
79	60	19	3.0	-37.0
78	60	18	3.0	-34.0
77	60	17	3.0	-31.0
76	60	16	3.0	-28.0
75	60	15	3.0	-25.0
74	60	14	3.0	-22.0
73	60	13	3.0	-19.0
72	60	12	3.0	-16.0
71	60	11	3.0	-13.0
70	60	10	1.0	-10.0
69	60	9	1.0	-9.0
68	60	8	1.0	-8.0
67	60	7	1.0	-7.0
66	60	6	1.0	-6.0
65	60	5	1.0	-5.0
64	60	4	1.0	-4.0
63	60	3	1.0	-3.0
62	60	2	1.0	-2.0
61	60	1	1.0	-1.0
60	60	0	0.0	0.0
59	60	-1	0.5	0.5
58	60	-2	0.5	1.0
57	60	-3	0.5	1.5
56	60	-4	0.5	2.0
55	60	-5	0.5	2.5
54	60	-6	0.5	3.0
53	60	-7	0.5	3.5
52	60	-8	0.5	4.0
51	60	-9	0.5	4.5
50	60	-10	0.5	5.0
49	60	-11	0.5	5.5
48	60	-12	0.5	6.0
47	60	-13	0.5	6.5
46	60	-14	0.5	7.0
45	60	-15	0.5	7.5
44	60	-16	0.5	8.0
43	60	-17	0.5	8.5
42	60	-18	0.5	9.0
41	60	-19	0.5	9.5
40	60	-20	0.5	10.0
39	60	-21	0.5	10.5
38	60	-22	0.5	11.0
37	60	-23	0.5	11.5
36	60	-24	0.5	12.0
35	60	-25	0.5	12.5

## NLH70

F5K Height Bonus/Height Penalty List for 'FAI 2021'

Launch Height	Nominal Launch Height	Height Difference	Points per Metre	Bonus/(Penalty)
85	70	15	3.0	-25.0
84	70	14	3.0	-22.0
83	70	13	3.0	-19.0
82	70	12	3.0	-16.0
81	70	11	3.0	-13.0
80	70	10	1.0	-10.0
79	70	9	1.0	-9.0
78	70	8	1.0	-8.0
77	70	7	1.0	-7.0
76	70	6	1.0	-6.0
75	70	5	1.0	-5.0
74	70	4	1.0	-4.0
73	70	3	1.0	-3.0
72	70	2	1.0	-2.0
71	70	1	1.0	-1.0
70	70	0	0.0	0.0
69	70	-1	0.5	0.5
68	70	-2	0.5	1.0
67	70	-3	0.5	1.5
66	70	-4	0.5	2.0
65	70	-5	0.5	2.5
64	70	-6	0.5	3.0
63	70	-7	0.5	3.5
62	70	-8	0.5	4.0
61	70	-9	0.5	4.5
60	70	-10	0.5	5.0
59	70	-11	0.5	5.5
58	70	-12	0.5	6.0
57	70	-13	0.5	6.5
56	70	-14	0.5	7.0
55	70	-15	0.5	7.5
54	70	-16	0.5	8.0
53	70	-17	0.5	8.5
52	70	-18	0.5	9.0
51	70	-19	0.5	9.5
50	70	-20	0.5	10.0
49	70	-21	0.5	10.5
48	70	-22	0.5	11.0
47	70	-23	0.5	11.5
46	70	-24	0.5	12.0
45	70	-25	0.5	12.5
44	70	-26	0.5	13.0
43	70	-27	0.5	13.5
42	70	-28	0.5	14.0
41	70	-29	0.5	14.5
40	70	-30	0.5	15.0
39	70	-31	0.5	15.5
38	70	-32	0.5	16.0
37	70	-33	0.5	16.5
36	70	-34	0.5	17.0
35	70	-35	0.5	17.5

## NLH80

F5K Height Bonus/Height Penalty List for 'FAI 2021'

Launch Height	Nominal Launch Height	Height Difference	Points per Metre	Bonus/(Penalty)
100	80	20	3.0	-40.0
99	80	19	3.0	-37.0
98	80	18	3.0	-34.0
97	80	17	3.0	-31.0
96	80	16	3.0	-28.0
95	80	15	3.0	-25.0
94	80	14	3.0	-22.0
93	80	13	3.0	-19.0
92	80	12	3.0	-16.0
91	80	11	3.0	-13.0
90	80	10	1.0	-10.0
89	80	9	1.0	-9.0
88	80	8	1.0	-8.0
87	80	7	1.0	-7.0
86	80	6	1.0	-6.0
85	80	5	1.0	-5.0
84	80	4	1.0	-4.0
83	80	3	1.0	-3.0
82	80	2	1.0	-2.0
81	80	1	1.0	-1.0
80	80	0	0.0	0.0
79	80	-1	0.5	0.5
78	80	-2	0.5	1.0
77	80	-3	0.5	1.5
76	80	-4	0.5	2.0
75	80	-5	0.5	2.5
74	80	-6	0.5	3.0
73	80	-7	0.5	3.5
72	80	-8	0.5	4.0
71	80	-9	0.5	4.5
70	80	-10	0.5	5.0
69	80	-11	0.5	5.5
68	80	-12	0.5	6.0
67	80	-13	0.5	6.5
66	80	-14	0.5	7.0
65	80	-15	0.5	7.5
64	80	-16	0.5	8.0
63	80	-17	0.5	8.5
62	80	-18	0.5	9.0
61	80	-19	0.5	9.5
60	80	-20	0.5	10.0
59	80	-21	0.5	10.5
58	80	-22	0.5	11.0
57	80	-23	0.5	11.5
56	80	-24	0.5	12.0
55	80	-25	0.5	12.5
54	80	-26	0.5	13.0
53	80	-27	0.5	13.5
52	80	-28	0.5	14.0
51	80	-29	0.5	14.5
50	80	-30	0.5	15.0
49	80	-31	0.5	15.5

F5K 2020 – NLH shown in Altis display



A - 4 Flights  
1:00, 2:00, 3:00 and 4:00 mins  
4 flights in 10 minutes (any order)

TM:1 Michael ABRAHAM PN:1 Round 1  
Freq=36.39 Ctry:AUS Class:E Group 3

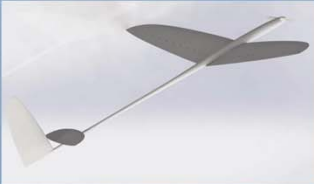
	Time	Height	Out of Pilot Area	General Penalty	Safety Penalty
1			<input type="checkbox"/>		
2			<input type="checkbox"/>		
3			<input type="checkbox"/>		
4			<input type="checkbox"/>		

Notes

Pilot \_\_\_\_\_ Timer \_\_\_\_\_



f5k - Overall Results [f 31/12/2030]															
Rank	Name	Ctry	RegnNo	Club	Team	Pilot #	Class	Score	Pcnt	Raw Score	Rnd1	Rnd2	Rnd3	Rnd4	Pity
											1, 2, 3, 4	L1 Smack in 7m	AllUp 4:30'	3, 3, 4	
1	BERRY, Don	AUS			3	9	A	2982	100.00	3844	1000	1000	*862	982	
										TimePts	545	240	530	560	
										HeightPts	100	90	90	0	
										PenaltyPts	0	0	0	0	
										Total	645	330	620	560	
2	ABRAHAM, Michael	AUS	00		1	1	E	2727	91.45	2727	1000	727	1000	*0	
										TimePts	560	240	622	0	
										HeightPts	-120	0	-25	0	
										PenaltyPts	0	0	0	0	
										Total	420	240	597	0	
3	DIMITROV, Ivaylo	BUL		BUL	2	5	A	2629	88.16	2629	*0	769	896	964	
										TimePts	0	240	486	550	
										HeightPts	0	14	240	0	
										PenaltyPts	0	0	0	0	
										Total	0	254	726	550	
4	CHABREL, Nick	AUS			1	3	E	2408	80.75	3091	*683	962	746	1000	300
										TimePts	560	240	550	570	
										HeightPts	26	20	55	0	
										PenaltyPts	125	0	0	0	
										Total	441	260	605	570	
5	BLOW, Darrel	AUS			2	4	E	2000	67.07	2000	0	1000	1000	*0	
										TimePts	0	240	664	0	
										HeightPts	0	30	55	0	
										PenaltyPts	0	0	0	0	
										Total	0	270	719	0	





# Simplified AMRT settings – controlled by motor time or pilot or Altitude switch

## 2020

### Nominal Launch Height (NLH)

One (1) day before the start of the competition, the Contest Director will announce the nominal launch height for the competition day. For this he will take the average windspeed between 11h and 17h.

Wind Forecast	Between [ m/s]		Nominal Launch Height (NLH) in AMRT	Motor time [sec] in AMRT
Light breeze	0	3	60	7
Moderate wind	4	6	70	8
Strong wind	over 6 m/s		80	9

\*The maximum wind speed for F5K contests is eight (8) m/sec

The motor stop is controlled by two parameters: the "Nominal launch height" and / or the "Motor time". Both parameters are set in a height device (AMRT, for example an Altis Nano from Aerobtec).

However, the pilot can stop the engine earlier or at a lower altitude to gain additional launch bonus points

## 2021

### Nominal Launch Height (NLH)

One (1) day before the start of the competition, the Contest Director will announce the nominal launch height for the competition day. For this he will take the average windspeed between 11h and 17h.

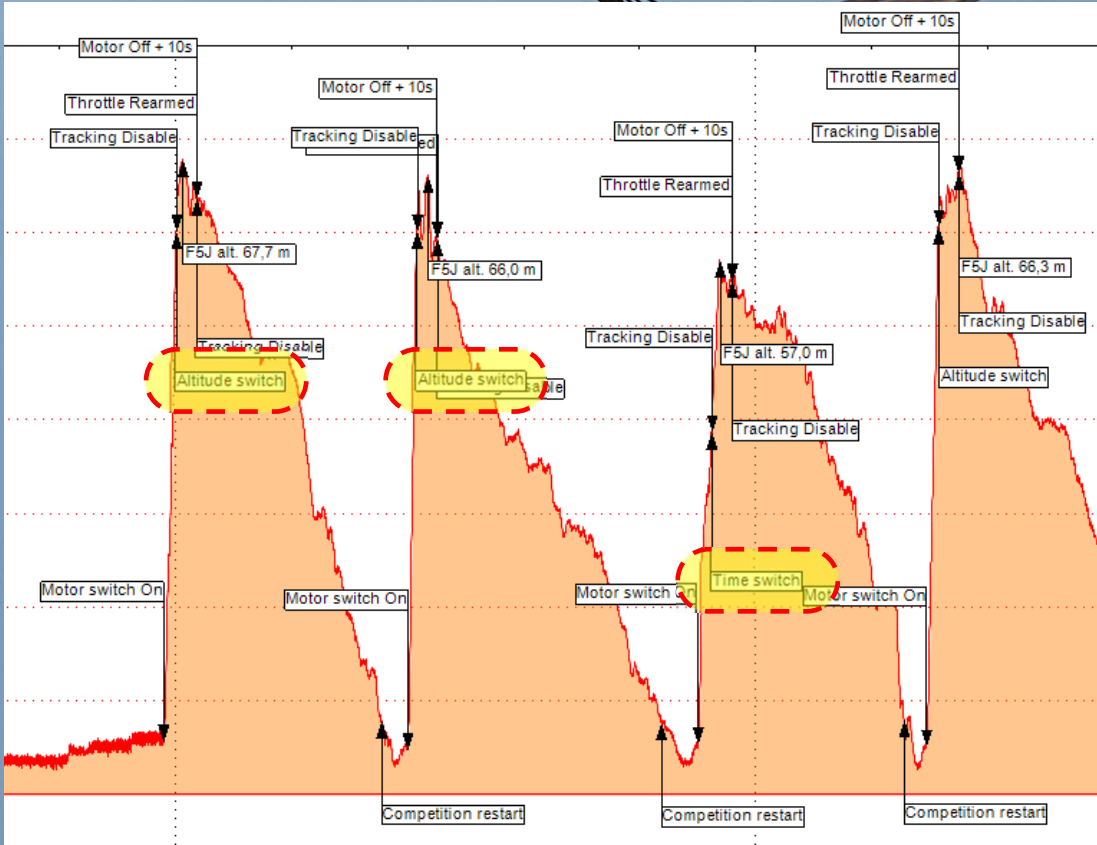
Wind Forecast	Between [ m/s]		Nominal Launch Height (NLH)	Motor time [sec] in AMRT
Light breeze	0	3	60	7 sec
Moderate wind	4	6	70	
Strong wind	over 6 m/s		80	

\*The maximum wind speed for F5K contests is eight (8) m/sec

The motor stop is controlled by two parameters: the "Nominal launch height" or the "Motor time". Both parameters are set in a altitude device (AMRT, for example an Altis Nano from Aerobtec).

However, the pilot can stop the engine earlier or at a lower altitude to gain additional launch bonus points

## 2021 - Maximum motor time to 7 seconds



## F5K 2020 – Less penalties for easy understanding

2019

Flight 1

Time  :

Height

Land Out ☐ (-10 points)

General Penalty

Safety Penalty

### General Penalty:

Launch procedure not followed	: <del>100 to the flight</del>
Launch after max number flights	: <del>100 to the flight</del>
Unsafe model retrieval	: <del>100 to the flight</del>
Pilot/helper stops plane during landing	: <del>100 to the flight</del>
Leaving pilot area (for retrieving plane) while flying	: <del>100 to the flight</del>
Motor started after launched from hand	: 100 to the flight
Starting model outside pilot area	: <del>100 to the flight</del>

### Safety Penalty

Motor restarts	: zero to the flight
Over run f 30 sec end of Task	: zero to the flight
Flying in forbidden area	: zero to the flight
Landing out of Bounds	: zero to the round
Hitting someone else	: zero to the round

2020 / 2021

### Flight and Round penalties:

#### Flight penalty:

- Flying in a no fly zone will result in a 300 point penalty for the flight score
- Overfly landing window will result in a 100 point penalty for the flight score

#### Round penalty:

- Hitting some else in another Pilot area will result is a zero (0) for the round
- Motor restart during flight will result in a zero (0) for the round
- Landing outside the flying field (as defined by the CD) will result in a zero (0) for the round

In case of a mid-air collisions of two or more model gliders the competitors will not be granted ~~reflights~~ nor will penalties be applied





F5K 2019 – F5K introduction & FAI submitted rules

F5K 2020 – F5K competition - update F5K rules

F5K 2021 – (FAI) updated rules



Adobe Acrobat  
Document

## CLASS F5K - THERMAL DURATION GLIDERS FOR MULTIPLE TASK COMPETITION WITH ELECTRIC MOTOR AND ALTIMETER/MOTOR RUN TIMER (AMRT)

### F5K introduction

The F5K event is a multi task contest where the RC gliders must start and land in a specific "Pilot Area" and perform specific tasks

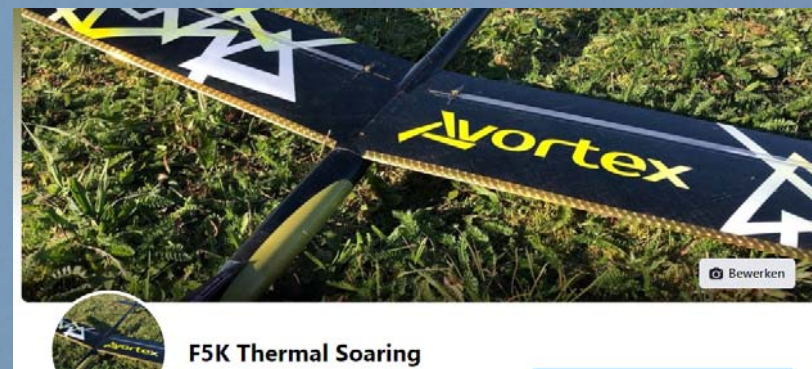
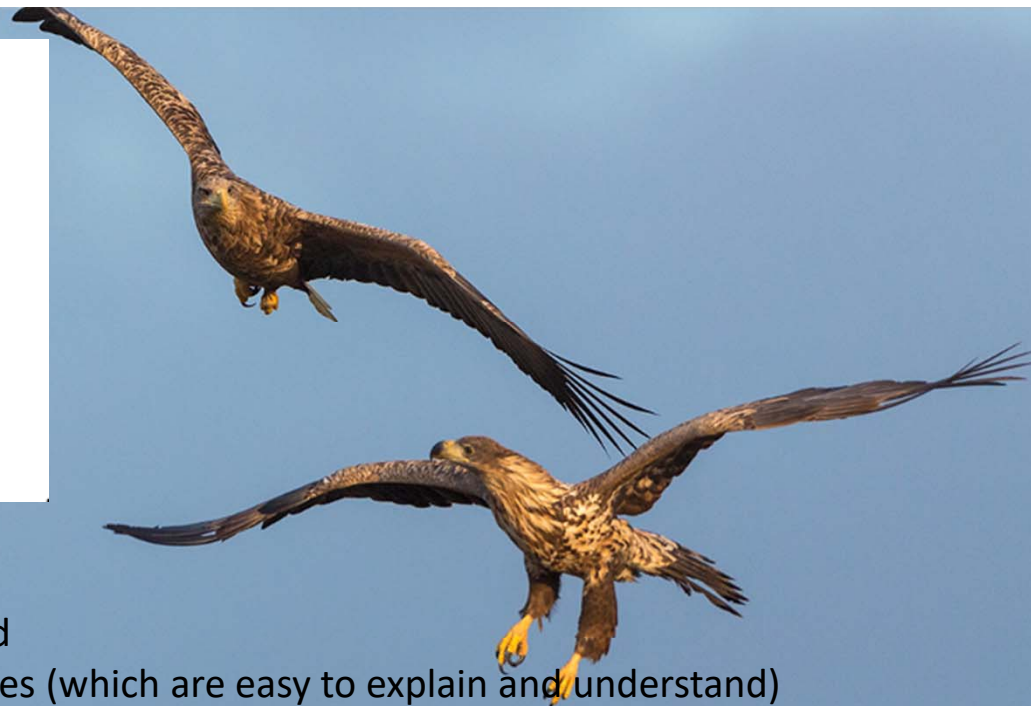
Each launch is scored with points made up of:

- flight time (may be zero)
- altitude bonus of penalty points
- land out of pilot area penalty
- safety penalties

If the total of all points is negative, the score is zero (0) . The score is the accumulation of the flight times, adjusted for penalties and bonuses for launch altitude, landing in the Pilot Area and safety penalties

### ➤ New F5K update

- Easy to read and understand
- Only 5 flight / round penalties (which are easy to explain and understand)
- Less penalties = Less discussion = more fun!
- Delete rules which are common sense
- Based on flown F5K competition and reviewed with pilots
- Will be used in 2021



F5K Thermal Soaring